EXHIBIT A

Curriculum Vitae

Michael Adrian Brook

Address

Home:
165 Charterhouse Cres.
Ancaster, Ontario
Canada, L9G 4M4.
(905) 648-7361

Business:
Department of Chemistry
McMaster University, ABB 459
1280 Main St. W.
Hamilton, Ontario
Canada, L8S 4M1.
(905) 525-9140 ext. 23483
FAX (905)-522-2509
E-mail: mabrook@mcmaster.ca
Web: www.chemistry.mcmaster.ca/silicone

Personal Data

Date of Birth:	November 2, 1955
Country of Birth:	Canada
Citizenship:	Canadian
Marital Status:	Married, 3 children.

Education

ETH-Zürich (Swiss Federal Institute of Technology) 1984-85
Postdoctoral Fellowship, Supervisor: Prof. Dr. D. Seebach

McGill University, Ph.D. (Dean's Honour List) 1983
Supervisor: Prof. T.H. Chan (conferred 1984)
Thesis: *The Trimethylsilyl Group in Organic Synthesis*

University of Toronto, Honours B.Sc. 1978
Supervisor: Prof. M. Thompson, 4th year project
Thesis: *The Oxidation Products of 8-hydroxyquinoline with Ceric Ammonium Nitrate*

University of Sussex, UK, Chemistry, first year 1974

Current Status at McMaster

Professor of Chemistry, tenured.
Associate Member, Department of Pathology and Molecular Medicine (1993-2002).
Associate Member, Chemical Engineering (1999-2004).

Professional Organizations

Member, Chemical Institute of Canada
Member, American Chemical Society
Member, McMaster Institute for Polymer Production Technology
Member, Brockhouse Institute for Materials Research (McMaster)

Employment History

McMaster University, Professor (Promoted July 1997) 1997-present
McMaster University, Associate Professor (Promoted July 1991) 1991-97
McMaster University, Assistant Professor (Tenured July 1990) 1985-91
Prof. W.H. Rapson, University of Toronto 1979
Determination of potential mutagenic products of the aqueous chlorination of wood pulp.
Dr. O. Merecz, Ontario Ministry of the Environment 1978, 1977
Analysis of polycyclic aromatic hydrocarbons by capillary GC and HPLC.
Mr. T. Segeren, Chevron Asphalt, Calgary 1976
Analysis of aqueous asphalt emulsions.

Consultancies

Silicone Injection Molding Company, name withheld 2006
Biomaterials Company, name withheld 2005
Jenner and Block, Chicago 2005
Innovalight, St. Paul, MN 2004-2005
Inamed CA 2003-2005
Digital Persona 2004
Vision Company, name withheld 2003-2004
MDS-Sciex, Toronto 2003-2004
Dow Corning Corporation, Midland MI 2003-2004
Federal Government of Canada (Justice, Health) 2003, 2004
Kent and McBride, Philadelphia 2003
GenoRx, CA 2003
Strategic Analysis International, Philadelphia 2003

Surtec, Valparaiso, ILL	2003
Eisenmann, Crystal Lake ILL	2002
Shook, Hardy and Bacon, Kansas City	2001-2002
Teltech (now Intota/Sopheon)	1993-
Stroock and Stroock and Lavan, New York	2001
Genencor, Palo Alto	2001
Sasol, Austin TX	2001
Arkmount Systems, Toronto	2000
Xanthon, NC	2000
Gillette, Boston	2000
Shapiro, St. Paul MN	2000
Hatch and Associates, Shanghai	2000
General Electric, Waterford NY	2000
CalEnergy, Calipatria CA	2000
Ballard Power Inc., Vancouver	2000
Dow Corning Corporation, Midland MI	1990-2000
Jones Rogers, Toronto	1997-2000
Kent and McBride, Philadelphia	1999-2001, 2003
Trojan Technologies, London ON	1998-2000
CK Witco, Sistersville WV	1999
FEI Technologies, Princeton NJ	1999
Unilever, Port Sunlight UK	1997-98
Tel-Tek/Norsk Hydro, Porsgrunn Norway	1998
Strook and Strook and Lavan, NYC	1997
Eastman Chemical, Kingsport, Tennessee	1997
Albemarle Corp., Baton Rouge Louisiana	1996
Delphax, Mississauga ON	1996
Magnifoam, Barrie ON	1996-97
Lotek, Markham, ON	1995
Price Waterhouse, (for AMT), Toronto	1995
IVACS	1995
Itron, Waseca MN	1994
Trace Sciences	1993
Abitibi Price, Canada	1991-92
S&S Productions	1990
C.I.L. (now I.C.I. Canada)	1988
Galen Pharma (now Biovail, Trimel Lifesciences)	1988-90

Scholarly and Professional Activities

ACS Award Committee, Member (specific award is confidential) 2005-2010

Silicon Chemistry (a journal), Regional Editor, The Americas, 2000-

Innovalight, St. Paul, MN, Scientific Advisory Board, Member` 2004-

5th Polymerization in Dispersed Media, Lyon France (2004) 2003-4
Member, International Organizing Committee

Scientific Advisory Board, Ian Wark Research Institute,
Member, University of South Australia 2002-4

The 3rd International Workshop on Organosilicon Polymers (2003) 2002-3
Member, Organizing Committee, June 23-25, 2003; Rensselaer Polytechnic Institute, Troy, NY

Formulation Days: Silicones and Fluorocarbons, Lyon France, Dec. 9, 10, 2002 2002
(Journés formulation silicones et fluorés), Member, Organizing Committee

Perspectives on Silicon, Ian Wark Research Institute, Adelaide, July 15-19, 2002.
Member, Advisory Board, University of South Australia 2002

Visiting Professor, Ian Wark Research Institute, University of South Australia 2002

Visiting Professor, Unité Mixte CNRS BioMérieux Lyon, France 2000

Visiting Scientist, Trojan Technologies, London Ontario 1999

Can. J. Chem. Special Issue in honour of Adrian Brook, (pub. Nov. 2000),
Guest co-editor 1998-2000

XXX Organosilicon Symposium, Co-Chair 1997

Visiting Professor, Université de Bordeaux, Bordeaux, France 1996

Visiting Professor, Université Paul Sabatier, Toulouse, France 1996

Visiting Professor, University of Amsterdam 1992-93

74th CIC Chemistry Conference
- Program Co-Chair 1990-91
- Abstract Editor 1990-91
- Symposium Organizer 1990-91

Conference Chairman, Southwestern Ontario
Undergraduate Chemistry Conference 1987

Journal Referee (in order of frequency)

1) Silicon Chemistry
2) Journal of the American Chemical Society
3) Langmuir
4) Canadian Journal of Chemistry
5) Chemistry of Materials
6) Biomaterials
7) Organometallics
8) Organic Letters
9) Applied Surface Science
10) Journal of Polymer Science Part A: Polymer Chemistry
11) Applied Organometallic Chemistry

12) J. Chem. Soc., Dalton Transactions
13) AIChE Journal
14) Science
15) Journal of Materials Chemistry
16) Artifical Organs
17) Journal of Inorganic Biochemistry
18) Australian Journal of Chemistry
19) Tetrahedron Letters
20) Journal of Organic Chemistry
21) Journal of Organometallic Chemistry
22) Synlett
23) Inorganica Chimica Acta
24) Chemische Berichte
25) Journal of Physical Organic Chemistry
26) Tetrahedron Computer Methodology

External Grant Reviews (in order of frequency)

1) NSERC Research Grants
2) NSERC Equipment Grants
3) Canadian Foundation for Innovation Review Chemistry Panel CFI Panel (Nov. 2001)
4) Canadian Institutes for Health Research grant review
5) NSERC Industrial Partnerships Program (CRD/IOR)
6) NSERC Strategic Grant
7) National Science Foundation (USA)
8) American Chemical Society, Petroleum Research Fund (PRF)
9) Killam Fellowship
10) US-Israel Binational Science Foundation

Government Panels

Expert Advisory Panel on Breast Implants, Therapeutic Products Directorate, Medical Devices Bureau, Health Canada, member, 2002

Scientific Advisory Panel on Breast Implants, Therapeutic Products Directorate, Medical Devices Bureau, Health Canada, member, March 2005

Expert Advisory Panel on Breast Implants, Therapeutic Products Directorate, Medical Devices Bureau, Health Canada, member, public panel, Sept. 2005

Areas of Interest

Organosilicon Chemistry

Silicon-biopolymer copolymers, Organofunctional silicones, Silica surface modification, Silicone Polymers,

Protein entrapped in silica and silicones (immobilized enzymes), Silane coupling agents,

Reactive Silicon Species

Other Interests

Ocular Materials, Oral Vaccines, Functional Colloids, Synthesis of Novel Polymers, Synthetic Organic Chemistry

Honours

Killam Fellowship (Canada Council of the Arts) 2003-2004
President's Award for Instruction (McMaster) 2003
McMaster Student's Union Teaching Award (Faculty of Science) 2002, 1997
Invited Professor, Ian Wark Research Institute, University of South Australia 2002
Gold Key Honour Award, McMaster University 2000
Invited Professor, Unité Mixte CNRS BioMérieux Lyon 2000
Nomination for McMaster Students Association Teaching Award 2001, 1999
1998, 96, 94
Synergy Award, Conference Board of Canada, NSERC 1996
with Mark R. McDermott and Connaught Laboratories, one of 4 annual Canada-wide awards
(Award given for Industry-University collaboration)
Invited Professor, Université de Bordeaux, Bordeaux, France 1996
Invited Professor, Université Paul Sabatier, Toulouse, France 1996
Invited Professor, Universeit van Amsterdam, Netherlands 1992-93
Dutch National Science Foundation Foreign Researchers Award 1992-93
(NWO Bezoekersbeurs)
IUPAC Travel Award 1991
Ichikizaki Travel Award for Young Chemists 1988, 1990
NSERC Canada University Research Fellowship 1985-95
NSERC Canada Postdoctoral Fellowship 1984-85
NSERC Canada Postgraduate Scholarship 1979-83
T. Sterry Hunt Award (McGill) 1979-80
Society of Chemistry and Industry Gold Key 1978
Gollop Award in Chemistry (Toronto) 1978
S.H. Jane Silver Medal (Toronto) 1977
ACS Undergraduate Award in Analytical Chemistry 1977
Ontario Scholar 1974

CO-WORKERS

M.Sc. students

STUDENT	YEAR(S)	TOPIC	CURRENT STATUS
Lihua Liu	2004	Biopolymer modified silicones	
Lucy Ye (with Bob Pelton, Chemical Engineering	2004	Bicompatible TiO_2	

Hazem Amarne 2004 Boronates as structuring agents
Weian Zhao 2004 Functional Colloids
Dave Thompson 2003 05 Tethered nucleotides
Sanela Martic 2003-05 *An Investigative Study of Silicon-Based* M.Sc., Ph.D. Queen's
Materials as Alternative Matrices for Maldi-Tof Applications
Kui Guo 2001-04 Protein in Sol Gel Silica
Forrest (Li) Gan 2001-03 Silicone peptides Ph.D., McMaster
Cindy Liu 2001-03 Tris-Modified Silicone Surfactants and Their Angiotech
Interactions with Proteins Vancouver, Scientist
Paul Zelisko 1999-01 Silicone-protein copolymers Ph.D., McMaster
Amro Ragheb 1999-01 Anti-fouling coatings Ph.D., McMaster
David Valentini 1994-96
Scientist, Glaxo
The coupling of synthetic and biological polymers: silicone - starch composites

David Bayles 1994-96 *Towards an α-silyl cation* Ph.D., McMaster
Grant Crowe 1992-94 *The β-effect of extracoordinate silanes* Scientist, Apotex
Tom Stefanac 1992-94 Scientist, Allelix
Silane based radical polymerization: functionalized homopolymers and copolymers
Mike Roth 1992-94 Scientist, PMC Film
Controlled formation of new Si-based polymeric systems Tottenham, Ont.
Graham McGibbon 1989-91 Scientist, Boeringer-
Gas phase measurements of the β-effect for vinyl cations Ingelheim, Montreal
Weifeng Yu 1988-91 Scientist, EPA
The *roles of ligands on silicon*
Oakville
Andrea Osterroth 1988-90 *Poly(methyl methacrylate)* sterically stabilized *with silicones*
(co-supervised with R..H. Pelton, Chemical Engineering)

Thomas Sebastian Zenon	1987-89	*Polytrichlorosilylstyrenes*	Scientist, Environ., Burl. ON
Mahmud Hadi	1986-88	The β-effect	MBA

Ph.D. students

STUDENT	YEAR(S)	TOPIC	CURRENT STATUS
Dave Thompson	2005-	Silicone-modified saccharides	
Forrest (Li) Gan	2003-	Stereoselective reduction	
Elodie Pacard	2002-05	Colloidal Silica Aggregates Joint with Christian Pichot, ENS-Lyon France	
Amro Ragheb	2001-05	Controlling Protein-Silicone Interactions With Poly(Ethylene Oxide)	
Paul Zelisko	2001-05	Silicone-protein copolymers	
Masaaki Amako	2001-04	Organometallics in silicones	
Mustafa Mohamed	1996-01	*Surface modification by silane photolysis*	
Sonya Balduzzi	1995-01	*Functional silane and cobalt protecting groups*	
Ahmed Alzamly	1999-00	*Silicone-protein copolymers*	withdrawn
Frank Laronde	1995-00	*C_2-symmetric Lewis acid catalysts: The role of imidazole in the stereoselective hydrosilylation of carbonyl compounds.*	Scientist MDS Proteomics
Rodica Stan	1994-99	*Synthesis of novel organofunctional silicones and silanes for interface control*	Scientist, GE, WV
Vasiliki Bartzoka	1994-99	*Silicone-protein interactions*	Scientist, Taro Chem..
Mark Stradiotto	1995-99	*The dynamics and reactivity of η^1-indenyl complexes* (co-supervised with with M. J. McGlinchey)	Asst. Prof. Dalhousie
Paul Charpentier	1993-97	Supported Metallocene Polymerization Catalysts (co-supervised with with A. Hamielec, Chemical Engineering)	PDF Duke
Ralph Ruffolo	1992-97	*Silanes and allylsilanes as possible precursors for transition metal-stabilized silylium ions* (co-supervised with with M. J. McGlinchey)	M. Environment ON
Howard Ketelson	1992-96	*The colloidal stability and surface chemistry of Stöber silica* (co-supervised with R..H. Pelton, Chemical Engineering)	Scientist, Alcon

Courtney Henry	1990-94	Electrophilic additions, vinylsilanes	Prof. Sheridan College
Carol Dallaire	1988-92	*The β-effect for vinyl cations*	Scientist, MDS Laval
Melvin Farquharson	1985-86	Lewis Acids	Deceased

P.D.F.s

STUDENT	YEAR(S)	TOPIC	CURRENT STATUS
Rebecca Voß	2005		
Ferdinand Gonzaga	2003	Silicone surfactants	
Yan Gao	2003	Proteins in silica	
Dan Chen	2000-	Plasticized sol-gels	
Amro Ragheb	2005-	Fluorinated silicones	
Jian (Jack) Guo	2004-05		Biocompatible silicone surfaces
Zheng Zhang	2001-04		Proteins in silica PDF, U. Washington
HongJian Tian	2001-04		Contact lens cleaning PDF Waterloo
Hong Chen	2001-04		Protein compatible surfaces Assistant Prof., Wuhan University of Technology
Shouhai Gao	2001-01		Contact lens cleaning
Alexander Tseitlin	1997-98	Wood-plastic composites	Research Chemist, Siltech, Toronto
Gilles Sèbe	1996-97	Wood-polyolefin Composites	Assoc. Prof., Bordeaux
Gang Hu	1995-97	Silicone Hydrophobes on Hydrophilic Polymers	Superior Coatings Ltd. Winnipeg.
Jianxiong Jiang	1992-96	Silicone Rubbers	Scientist, Chengdu Silicone Research Institute
Christine Gottardo	1995-96	Lab Manager and Paper silanization	Asst. Prof., Lakehead Univ.

Christophe Le Roux Toulouse	1993-94	Radical Reactions of Hydrovinylsilanes,	CNRS,
C.-K. Yeom Membrane	1992-94	Pervaporation Membranes	Korean Company
Hari Gupta McMaster	1992-93	Silicone Membranes	PDF,
Pankaj Modi McMaster	1991-92	Oligosilylstyrenes, composite membranes	PDF
Wei Li China	1991-92	Membranes from silicones	Scientist,
T. Mancilla-Percino CINVESTAS	1990-91	β-effect; Friedel-Crafts with ketones	Prof. Mexico City
Stefan Müller BASF	1988-89	The β-effect; Friedel-Crafts with ketones	Scientist, Germany.

Technicians

STUDENT	YEAR(S)	TOPIC	CURRENT STATUS
Renita D'Souza	2004		
Kui Guo	2001	Silica Sol Gels	
Cindy Liu	2000	Chelating silicones	
Tom Stefanac student	1994	Recycling silicone	see M.Sc.
Chunfeng Guo	1991-3	Coupling reagents, glass coatings Parkhurst Knitwear	

Summer Students/In Course Students

STUDENT	YEAR(S)	TOPIC	CURRENT STATUS
Aid Atlic	2005	Silicones by enzymes	
Amélie Burleraux	2005	Non-bleeding silicones	
Jill Ranger student	2003-5	Proteins and silicones	4th year
N. Oakley	2004	Sterically bulky silicones	
S. Krakar	2004	Non-leaching silicone gels	
L. Tran	2004	Enantioselective reduction	
Meghan Marshall	2003-4	Western Blots of Proteins on Silicone (with H. Sheardown)	2003
Lisa Wilkinson Queen's	2003-4	Silica aggregation	4th year student

Lee Freiburger	2003-4	Metallomesogen synthesis	3rd year student
Renita D'Souza	2002-4	Silica formulations (done in school year AND summer)	
Mike Hrynyk	2002-4	Proteins in silicone rubber (done in school year AND summer)	
Joanne Poloczek	2003	Borosilylation (with Steve Westcott, Mt. Allison)	3rd year student
Stefanie Mortimer	2003	Proteins on modified silica surfaces	4th year student
Aoife O'Carroll	2003		3rd year student
Jonathan Schinkel	2003	Metallomesogen synthesis	4th year student Mt. Allison
Susan Jo	2003	Drug delivery from silicone elastomers	2nd year student
Cynthia Kwong	2002-3	Cleaning contact lenses (done in school year AND summer)	
Ken Mak	2002-3	New silicone emulsions (done in school year)	
Allison Chapman	2002	Contact lens cleaning	
Stefanie Mortimer	2002	Proteins on modified silica surfaces	
Michele Riordon	2002	Silicone-protein conjugates	
Meaghan Walsh	2002	Sol-gel protein in silica	
Jannine Crowley	2001	Silicone Emulsions	
Meaghan Walsh	2001	Enzyme Emulsions	
Laveena Munshi	2001	Chelating Silicones	Medical School
Jannine Crowley	2000	Anti-fouling Coatings	
Ines Alonso Bilbao	2000	Silicones and Steric Stabilization	Ph.D.
Andre Lapierre Pittsburgh	2000	Enantioselective Reductions	Ph.D.
Krista Kerr	1999	Enantioselective ketone reduction	
Dino Alberico Guelph	1999	Thermplastic elastomeric silicones	Ph.D.
Bryan Davies McMaster	1998	Chelating Silicones	3nd Year
Friedrika Becker Duisburg	1997	Ethylene Oxide Sterilization of Silicones	Ph.D.
Marko Baller	1997	Decouplable Coupling Agents.	Ph.D. Basel
Bryan Davies McMaster	1997	Silicone Wood Composites	2nd Year
Stacey Bridges Student	1996	Wood-PE Composites	Grad.
Denny Lin Toronto	1995	Chiral tartrate silanes	M.Sc.

Herman Yang	1994-96	DMSO for D_3 production	Quantum Computers
Hanan Atala	1994-95	Amino acid derived surfactants	
Helen B. Penny	1992	Hydrosilanes	
Ralph Ruffolo	1992	Tartrate modified silicones	PDF Toronto
M. Tomaschewski BioChem.	1987	The β-effect; Acylation	Scientist, Thera., Laval
Patricia Falletta	1986-87	Polysilylstyrenes	Scientist, CCIW
Jennifer Townsend	1986	Polysilylstyrenes	Scientist, Ont. Min. Environment
Axel Neuy	1988-89	β-effect	Ph.D. Universität Duisburg, Germany
Peter Hülser	1985-86	The Silicon α- and β-Effects	SurTec Gmbh, Germany.

Fourth Year Project Students

STUDENT	YEAR(S)	TOPIC	CURRENT STATUS
Stephanie Krakar	2004	Oligocarboxylate silicones	
Jill Ranger	2004	Surface bound nucleosides	
Stefanie Mortimer	2003	Heparin delivery	M.Sc., N. Carolina
Lauren Scott	2003	Antithrombogenic surfaces	M.Sc., UBC
Andy Cleaver	2000	Enantioselective Reductions	
Ines Alonso	1999	Silicones and Steric Stabilization	
Andre Lapierre	1999	Enantioselective Reductions	
Dwayne Stresman	1998	Siloxycarbenes (with J. Warkentin)	
Dino Alberico	1998	Cp-silicones, thermal crosslinking	
Gladys Chan	1998	Protein-Silicone Latexes	Medical school
Joerg Urschey	1997	Fluorescent Silicones	
Andrea Straatmann	1997	Water borne coupling agents	
Armin Schneider	1996	Hydrosilation catalysts Diplomearbeit, Duisburg	
Jeff Kent	1996	Enzymes on Silicone Surfaces	

Alex Andronov	1995	Amphiphilic Polymers	M.Sc.
Berkely			
Hanan Atala	1995	Diels-Alder Based Coupling Agents	
Thomas Kuhnen	1995	Inorganometallic Polymers	Ph.D.
Duisburg			
Andrew Stadler	1994	Organomodified silicone colloids	
Jay Atanasoff	1994	Pt hydrosilation	
Chris Roos	1993	Silanone from thermal decomposition	Ph.D.
Frankfurt			
Dagmar Ulbrich	1993	Pausen Khand Reactions Using Disilyl-dicobalt	Ph.D.
Frankfurt,			
		Alkyne complexes	Germany
Jason Bernais	1993	Silicone-cellulose copolymers	MBA
Mike Roth	1991	see M.Sc. student	
Bjorn Ramacher	1991	Tetrakis(trimethylsilylalkynylsilanes	Ph.D.
Duisburg			
Rick Barker	1990	Silicone stabilized colloids	Scientist,
Pioneer			
			Balloon,
Stoney Creek			
Ralf Jueschke	1989	The β-effect; Diastereoselectivity	Ph.D.
Duisburg			
Bernhard Hladik	1989	Silicone radical reactions	Ph.D.
Duisburg			
Stefan Wenzel	1990	Silylstyrene condensations	Ph.D.
Duisburg			
Daniel Chau	1989	Slow release drugs	Newalta
Corp.			
Sean Guenette	1988-89	Slow release drugs	Ph.D.
Ottawa			
Axel Neuy	1988-89	The β-effect	Ph.D.
Duisburg			
Christina Kremers	1987-88	Silane polymers and chiral silaheterocycles	Ph.D.
Duisburg			
Elizabeth Jefferson	1987-88	The β-effect with Styrylsilanes	PDF,
Toronto			
George Elia	1986-87	Mechanism of Mukaiyama Reaction	
Patricia Falletta	1986-87	Polysilylstyrenes,	Scientist,
CCIW			
Peter Hülser	1985-86	The Silicon α- and β-Effect	SurTec
Gmbh,			
			Germany.

Research Funding

Applications (Type O= Operating, E = Equipment, I = Infrastructure, MI = Major Installation, C=Contract)

Applicants Year	Title of Project, Grantor	Type	Amount
	Biomimetic Intraocular Lens Surfaces for Minimization of Posterior Capsule Opacification, NSERC	**CHRP**	
Brook, M. A. 2006 Cappretta, A.	HPFC Chromatograph, NSERC	E	29,604
Brook, M. A. 2006	GPC Chromatograph, NSERC	E	86,610
Sheardown, H.D. 2006-2010 Brook, M.A.,. West-Mays, J.	PDMS Based Keratoprosthesis In vitro and in vivo CIHR (Brook portion, $35K)	O	142,500
Brook, M. A. 2006-11	Silicone Biocompatibility from Interfacial Control NSERC	O	115500

Research Funding

Funding Held (Type O= Operating, E = Equipment, MI = Major Installation)

Brook, M.A. 2006 Ganachaud, F.	Biocompatible, Thixotropic amphiphilic silicones as retinal tamponades, Ambassade de France (exchange Montpellier)	Travel	10,000
Pelton, R.H. 2006-10 Brook, M. A. 18 others	Sentinel: The Canadian Research Network on Bioactive Paper, NSERC, Brook portion 5%	O	10,000,000
Brook, M. A. 2005 *Sheardown, H.D.*	Intraocular lenses, AMO	Grant	157500
Sheardown, H.D. 2004-05 *Brook, M. A.*	PDMS – Hydrogel Interpenetrating Networks as Ophthalmic Biomaterials	I2I	125000

Brennan, J.D. 2004 Brook, M. A.	Mercury Porosimeter for Characterization of Macroporous Silicas, NSERC	RT1(E)	88,419
Brook, M. A. 2004	Silicone-Protein complexes: Using molecular affinity to clean surfaces, Alcon Lab. (US 100000)	O	130000
Brook, M. A. 2004	Anti-fouling surfaces to reduce clotting (provided by J. Weitz, Hamilton Health Sciences	O	20000
Brook, M. A. 2003	Dow Corning Toray Silicones Silicone Liquid Crystals (M. Amako)	O	89000
Brash, J. 2003 +3 others	Gamma Counter, NSERC	E	39405
Brennan, J.D. 2003-6 Brook, M. A. Pinto, D. Volmer, D. Covey, T.	Development of Mesoporous Monolithic Columns for High Throughput Proteomics Applications NRC.NSERC, with MDS-Sciex BROOK PORTION (37%)	CRD	1.0×10^6
Sheardown, H. 2003,4 Griffith, M. 2005 Brook, M. A.	PDMS Based Artificial Corneas – Cornea Epithelial and Stromal Cell Interactions and Device Design NSERC CHRP (40%)	O	110000 120000
Sheardown, H. 2003-2006 Brook, M. A. Wong, D.	Silicone Lenses for the Mitigation of Scarring Following Corrective Laser Eye Surgery Materials & Manufacturing Ontario (Brook portion 40%)	O	70000
Brook, M. A. 2001-2005 Control, NSERC	Silicon at the Interface: Synthesis Directed to Interfacial	O	74500
Brook, M. A. 2003	Silicone-Protein complexes: Using molecular affinity to clean surfaces, Alcon Lab. (US 100000)	O	155000

Brook, M. A. 2002	Silicone-Protein complexes: Using molecular affinity to clean surfaces, Alcon Lab. ($US 80000)	O	120000
Brook, M. A. 2001-2002	Dow Corning Toray Silicones PhD Research Student Funding (M. Amako)	O	25000
Brook, M. A. 2001	International Collaborative Travel Grant, CIHR (+ living expenses in France up to 2 months paid by CNRS)		1600
Brook, M. A. 2001	Silicone-Protein complexes: Using molecular affinity to clean surfaces, Alcon Lab.	O	90000
Brook, M. A. 2001	Protein-Containing Emulsions in Mucosal Immunology	O	84750
McDermott, M. 2002	NSERC CHRP.		89750
2003			84750
Organ, M. 2001-3	Accelerating Drug Discovery Using Frontal Affinity	CRD	1.6x106
Brook, M. A. Brennan, J.D. Schriemer, D. 2001-3	Chromatography/Mass Spectrometry, NSERC, with INH with MDS-Sciex BROOK PORTION		100000
McCarry, B. E. 2000 Brook, M. A. (16 others)	Biomolecular Interactions, Ontario Innovation Trust	MI	5,190,000
McCarry, B. E. 2000 Brook, M. A. (16 others)	Biomolecular Interactions, CFI	MI	5,190,000
Harrison, P. 2000 Warkentin, J. McGlinchey, M. Brook, M. A. Berti, P.	FT-IR System for *in-situ* Reaction Monitoring, NSERC	E	106145

Valliant, J.F.			
Brook, M.A. 2000 Harrison, P.H. Bain, A., Leigh, W.J. McGlinchey, M.J. Epand, R.; Valliant, J.F.	300 MHz CP-MAS NMR Spectrometer, NSERC	MI	336800
Brook, M. A. 2000-2001	Reduced Fouling Quartz Surfaces for UV Sterilization of Water, Material & Manufacturing Ontario	O	40000
Pelton, R.H. 1999-2003 Brook, M.A.	Calcium Carbonate Adhesion to Paper, Mintech Canada, Grant-in-Aid (13 hours/month)	O	35840
Brook, M. A. 1999-2000	Reduced Fouling Quartz Surfaces for UV Sterilization of Water, Trojan Technologies Inc.	O	10000
Brook, M. A. 1999-2000	Reduced Fouling Quartz Surfaces for UV Sterilization of Water, Material & Manufacturing Ontario	O	70000
Pelton, R. H. 1999-2002 Brook, M. A.	Calcium carbonate adhesion to paper, Mintech Canada	O	30,000
Brook, M. A. 1999	Silicone Spreading, Unilever Research	C	6500
Terlouw, J. K.. 1998 Brook, M. A. Bain, A. Stöver, H.	MS Infrastructure	I	498000
Brook, M. A. 1998	Silicone Membranes, Tel-Tek Norsk Hydro	C	28000
Brook, M. A. 1998	Modifying Quartz Surfaces, Trojan Technologies	C	13462

Brook, M. A. 1998-2000	Dual Functionality Coupling Agents for the Fabrication of Wood-Plastic Composites, Material & Manufacturing Ontario	O	80000
Brook, M.A. 1997	Silicone sterilization with EO OCMR and Walsh Medical Devices	O	22000
Brook, M.A. 1997-2000	Functional Silane Coupling Agents : Grafting Incompatible Materials and Anchoring Transition Metals, NSERC Operating, 40 hr.	O	44000
Brook, M.A. 1997	Wood/Recycled Polyolefin Composites, OCMR	O	20000
Lott, J. 1996 Brook, M.A. (one of several major applicants)	Environmental Microscope, NSERC, Major installation	MI	633481
Kramer, J. M. 1996 Brook, M.A. Ford, D. Schwarz, H. Yang, D.	Molecular Modelling Software and Computer, NSERC	E	47710
Brook, M.A. 1996	Wood/Recycled Polyolefin Composites, OCMR	O	50000
Brook, M.A. 1994-6	Microparticle Delivery Systems for Immunogenic Agents, NSERC CRD Matching Funds	CRD	64500
Brook, M.A. 1995	Wood/Recycled Polyolefin Composites, OCMR	O	60000
Brook, M.A. 1995-96 Dickson, J. M.	Novel Membranes, Ontario-Singapore Technology (50% Brook)	O	92000
Brook, M.A. 1995-7 Pelton, R.	Silicone Modified Papers, MODO (50% Brook)	O	21000

Brook, M.A. 1995-6 McDermott, M. Underdown, B.	Microparticle Delivery Systems for Immunogenic Agents, URIF Matching Funds, (50% Brook)	O	122000
Brook, M.A. 1994-6 McDermott, M. Underdown, B.	Oral Immunization Delivery Systems, Connaught Laboratories (50% Brook)	O	120000
Brook, M.A. 1994 Pelton, R. Winnik, F., Stöver, H.	Dynamic Light Scattering Apparatus, NSERC,	E	105197
Brook, M.A. 1994	Silicon based Polymerization Inititors, OCMR	O	35000
Brook, M.A. 1994	Oral Immunization Delivery Systems, Connaught Lab.	O	120000
Brook M.A. 1993-96	Stereocontrol and Silicon: Application to Organic and Polymer Synthesis, NSERC	O	31000
Brook, M.A. 1993-	Silicon based Polymerization Inititors, OCMR	O	20000
Stöver, H.D.H. 1992 Brook, M.A.	Differential Scanning Calorimeter, Thermalgravimetric Analyzer, NSERC	E	71559
Brook, M.A. 1991	Oligosilylstyrenes as Glass Coating Materials, OCMR	O	15500
Brook, M.A. 1990-92 Dickson, J.	Pervaporative Membranes, URIF Matching Funds (50% Brook)	O	57000
Brook, M.A. 1990-92 Dickson, J.	Pervaporative Membranes, NSERC CRD Matching Funds (50% Brook)	O	54000
Brook, M.A. 1990-92	Pervaporative Membranes, ICST	O	45000

Dickson, J.	(50% Brook)		
Brook, M.A. 1990-92	Organosilicon compounds: From the β-effect to Polymers, NSERC	O	30000
Brook, M.A.	Polymers, OCMRO	4500	1989
Brook, M.A. 1989	Silicone Polymers, Dow Corning	O	6500
Brook, M.A. 1989	Gel Permeation Chromatograph, NSERC	E	54260
Brook, M.A. 1988	Sterically Stabilized Particles, Xerox	O	5000
Pelton, R.	(50% Brook)		
Brook, M.A. 1988	Glycol-Silicone Polymers, J.P. Bickell Foundation	O	12500
Brook, M.A. 1988-89	Chiral Manifolds & Lewis Acids: Organosilane & Titanium Compounds, NSERC	O	30000
Brook, M.A. 1988	Oligotrihalosilylstyrenes: & Polymer Blending Agents OCMR	O	12500
Brook, M.A. 1987-90	Polysilylstyrenes, MIPPT	O	5000
Brook, M.A. 1987	Silicone Coating Materials, SEED (E + IC)	O	2600
Falletta, P.			
Brook, M.A. 1987	Organosilicon Compounds Bearing Chiral Ligands: Synthetic Applications NATO	O	2500
Brook, M.A. 1987	Lewis Acids in Enantioselective Organic Synthesis McMaster University	O	13000

Brook, M.A. 1986	Polysilylstyrenes, MIPPT	O	2000
Brook, M.A. 1985-87	The Application of the Trifluorosilyl Group to Organic Synthesis NSERC	O	17280
Brook, M.A. 1985	Lewis Acids in Organic Synthesis, McMaster University	O	15000

Lifetime Publications (Green – undergraduates; Red = graduate students; BLUE = PDFs)

Peer Reviewed

(a) Books

1 B **BROOK, M. A.** ***SILICON IN ORGANIC, ORGANOMETALLIC AND POLYMER CHEMISTRY,*** **WILEY: NEW YORK, 2000**, 608 pages, (704 including tables, and indices, SOLE AUTHOR).

(b) Contributions to Books

6. F M. Liu, A. Ragheb, P. Zelisko, and M. A. Brook, *Preparation and Application of Silicone Emulsions Using Biopolymers*, In *Colloidal Biomolecules, Biomaterials, and Biomedical Applications* (Surfactant Science, Vol. 116), Elaïssari, Abdelhamid, Ed.; Mercel Dekker Inc., 2004, Chapter 11, pages-309-329, invited manuscript.
5. N Laronde, F.; Brook, M. A. *Amino acid catalysts for the enantioselective hydrosilane reduction of carbonyl groups*, In *Catalysts for the Fine Chemical Synthesis, Vol. 1*, **Hydrolysis, Oxidation and Reduction,** Roberts, Stan M.; Poignant, G., Eds., 2002, pp. 169-172.
4. F Bartzoka, V.; McDermott, M. R.; Brook, M. A., *Protein-Silicone Interactions at Liquid/Liquid Interfaces*, In *Emulsions, Foams and Thin Films*, Mittal, K. L.; Kumar, P., Eds., Dekker, New York, 2000, Chap. 21, pp. 371-380, Invited manuscript.
3. R Adrian G. Brook and Michael A. Brook, *The Chemistry of Silenes, Adv. Organomet. Chem.*, **1996**, *39*, 71-158.
2. R Michael A. Brook, *1,2-bis-(Trimethylsilyloxy)cyclohexene*, in *Encyclopaedia of Reagents in Organic Synthesis,* L. Paquette, Ed., John Wiley and Sons, Vol 1, 1995, p. 602, invited manuscript.
1. R Michael A. Brook, *tert-Butyl α-chloro-α-trimethylsilylacetate*, in *Encyclopaedia of Reagents in Organic Synthesis,* L. Paquette, Ed., John Wiley and Sons, Vol. 2, 1995, p. 862, invited manuscript.

(c) Journal Articles (C = communication, N = Note, F = Full paper, R = Review)

128. C Ferdinand Gonzaga and Michael A. Brook, *Structured Nanoparticles in Silicone Surfactant Multilayers*, *Angew. Chem. Int. Ed.*, submitted 11/8/2005

Accepted for Publication

132. C Weian Zhao, Yan Gao, Srinivas A. Kandadai, Michael A. Brook* and Yingfu Li. *DNA Polymerization on Gold Nanoparticles via Rolling Circle Amplification: Towards Novel Scaffolds for Three-Dimensional Periodical Nanoassembly*, accepted *Angew. Chem. Ed. Engl.* Jan 2006.
131. F Elodie Pacard, Michael A. Brook, Amro M. Ragheb, Christian Pichot and Carole Chaix, *Elaboration of silica colloid/polymer hybrid support for oligonucleotide synthesis*, *Colloids Surf. B: Biointerfaces*, accepted, Dec. 2005.
130. F Chen, H., Brook, M. A., Sheardown, H. D., Chen, Y., Klenkler, B. *A Generic Bioaffinity Surfaces*, accepted *Bioconjugate Chemistry* Nov 2005 (ACS ASAP CODEN: BCCHES ISSN:1043-1802. AN 2005:1345621).

Publications

129. F Hodgson, Richard J.; Besanger, Travis R.; Brook, Michael A.; Brennan, John D. *Inhibitor Screening Using Immobilized Enzyme Reactor Chromatography/Mass Spectrometry. Anal. Chem.* **2005**, *77*, 7512-7519.

128. Liang, L.; Dickson, J. M.; Zhu, Z.; Jiang, J.; Brook, M. A., *Removal of 1,2-dichloroethane from aqueous solutions with novel composite polydimethylsiloxane pervaporation membranes. J. Appl. Polym. Sci.* **2005**, *98*, 1477-1491.
127. F Chen, H.; Chen, Y.; Sheardown, H.; Brook, M. A. *Immobilization of heparin on a silicone surface through a PEG spacer, Biomaterials*, **2005**, *26*, 7418-1724.
126. C Ragheb, A. M.; Brook, M. A. *Highly stable chymotrypsin entrapped in silicone elastomers*, *Biomaterials* **2005**, *26*, 6973-6983.
125. F Yang Chen, Zheng Zhang, Xihua Sui, John D. Brennan and Michael A. Brook, *Reduced Shrinkage of Sol-Gel Derived Silica Using Sugar-based Silsesquioxane Precursors*, *J. Mater. Chem.* **2005**, *15*, 3132 – 3141.
124. F Hodgson, Richard J.; Brook, Michael A.; Brennan, John D., *Capillary-Scale Monolithic Immunoaffinity Columns for Immunoextraction with In-Line Laser-Induced Fluorescence Detection. Anal. Chem.* **2005**, *77*, 4404-4412
123. F Dong, Hanjiang; Brook, Michael A.; Brennan, John D., *A New Route to Monolithic Methylsilsesquioxanes: Gelation Behavior of Methyltrimethoxysilane and Morphology of Resulting Methylsilsesquioxanes under One-Step and Two-Step Processing, Chem. Mater.* **2005**, *17*, 2807-2816.
122. F Sonya Balduzzi, Michael A. Brook and Michael J. McGlinchey, *Diastereoselective Addition of Allyl- and Crotylstannanes to Dicobalt-Complexed Acetylenic Aldehyde*, *Organometallics* **2005**, *24*, 2617-2627.121. F Kovarik, Peter; Hodgson, Richard J.; Covey, Tom; Brook, Michael A.; Brennan, John D. *Capillary-Scale Frontal Affinity Chromatography/MALDI Tandem Mass Spectrometry Using Protein-Doped Monolithic Silica Columns*, *Anal. Chem.* **2005**, *77*, 3340-3350.

120. F Masaaki Amako, Jonathan Schinkel, Michael A. Brook, Michael J. McGlinchey and James F. Britten, *Rac/meso Transformations of Disiloxane-bis(1-indenyl)-ansa-ferrocenes: An x-ray Crystallographic and NMR Study, Organometallics*, **2005**, *24*, 1533-1543.119. F. Xihua Sui, Jorge A. Cruz-Aguado, Yang Chen, Zheng Zhang, Michael A. Brook and John D. Brennan, *Properties of Human Serum Albumin Entrapped in Sol-Gel-Derived Silica Bearing Covalently Tethered Sugars, Chem. Mater.* **2005**, *17*, 1174-1182.
118. F Hong Chen, Michael A. Brook, Yang Chen, and Heather Sheardown, Surface properties of PEO-silicone composites: reducing protein adsorption *J. Biomaterials Sci., Polym. Ed.*, **2005**, *16*, 531-548.
117. F Hong Chen, Zheng Zhang, Yang Chen, Michael A. Brook, Heather Sheardown, Protein Repellant Silicone Surfaces by Covalent Immobilization of Poly(Ethylene Oxide), *Biomaterials*, **2005**, *26*, 2391-2399.
116. F Amro Ragheb, Michael A. Brook and Michael Hrynyk, *Highly active, lipase silicone composites, Biomaterials,* **2005**, *26*, 1653–1664.
115. F. Masaaki Amako, Jonathan Schinkel, Lee Freiburger and Michael A. Brook, *Silicone Compatible, Siloxane-Supported Organometallic Compounds and Their Catalytic Activities for the Hydrosilylation of Vinylsilanes and Dienes, J. Chem. Soc., Dalton Trans.*, **2005,** 74 – 81.

114. F Michael A. Brook, Yang Chen, Kui Guo, Zheng Zhang and John D. Brennan, *Sugar-Modified Silanes: Precursors for Silica Monoliths, J. Sol. Gel. Sci. Technol.* **2004**, *31*, 343-348.
113. F Dina Tleugabulova, Andy M. Duft, Zheng Zhang, Yang Chen, Michael A. Brook and John D. Brennan, *Evaluating Growth Mechanisms of Silica Particles using Fluorescence Anisotropy Decay Analysis, Langmuir* **2004**, *20*(14), 5924-5932.
112. F Cruz-Aguado, Jorge A.; Chen, Yang; Zhang, Zheng; Brook, Michael A.; Brennan, John D. *Entrapment of Src Protein Tyrosine Kinase in Sugar-Modified Silica. Anal. Chem.* **2004**, *76*(14), 4182-4188.
111. F Jorge A. Cruz-Aguado, Yang Chen, Zheng Zhang, Nadine H. Elowe, Michael A. Brook and John D. Brennan, *Ultrasensitive ATP Detection Using Firefly Luciferase Entrapped in Sugar-Modified Sol-Gel Derived Silica, J. Am. Chem. Soc.* **2004**, *126*, 6878-6879.
110. F R. J. Hodgson, Y. Chen, Z. Zhang, D. Tleugabulova, H. Long, X. Zhao, M. Organ, M. A. Brook, J. D. Brennan, *Protein-Doped Monolithic Silica Columns for Capillary Liquid Chromatography Prepared by the Sol-Gel Method: Applications to Frontal Affinity Chromatography, Anal. Chem.* **2004**, *76*, 2780-2790.
109. F Liang, Liang; Dickson, James M.; Jiang, Jianxiong; Brook, Michael A. *Pervaporation of 1,2-dimethoxyethane from aqueous solutions by crosslinked oligosilylstyrene-poly(dimethylsiloxane) composite membranes. J. Appl. Poly. Sci.* **2004**, *92*, 2284-2294.

108. F Liang, Liang; Dickson, James M.; Jiang, Jianxiong; Brook, Michael A. *Effect of low flow rate on pervaporation of 1,2-dichloroethane with novel*

polydimethylsiloxane composite membranes. J. Membrane Sci. **2004**, *231(1-2)*, 71-79.

107. F Michael A. Brook, Yang Chen, Kui Guo, Zheng Zhang and John D. Brennan, Sugar-Modified Silanes: Precursors for Silica Monoliths, *J. Mater. Chem.* **2004**, *14*, 1469 – 1479.
106. F Dina Tleugabulova, Zheng Zhang, Yang Chen, Michael A. Brook and John D. Brennan Fluorescence Anisotropy in Studies of Solute Interactions with Covalently Modified Colloidal Silica Nanoparticles, *Langmuir* **2004**, *20*, 848-854.
105. F Michael A. Brook, Hong Chen and Heather Sheardown, Silicone elastomers for reduced protein adsorption, *Biomaterials*, **2004**, *25*, 2273-2282.
104. F Frank J. LaRonde and Michael A. Brook, *Allylation of aldehydes catalyzed by chiral N,N'-bis(N-methyl-2-methylene-4,5-bisphenyl-imidazole)-1,2-cyclohexane diamine rhodium (III) complexes*, *Can. J. Chem.* **2003**, *81*, 1206-1212, issue dedicated to John Harrod, invited manuscript.
103. F Amro Ragheb, Michael A. Brook and Michael Hrynyk, *Highly activated, silicone entrapped, lipase*, *Chem. Commun.*, **2003**, 2314–2315.
102. F Travis R. Besanger, Yang Chen, Anil K. Deisingh, Richard Hodgson, Wen Jin, Stanislas Mayer, Michael A. Brook and John D. Brennan, *Screening of Inhibitors using Enzymes Entrapped in Sol-Gel Derived Materials*, *Anal. Chem.* **2003**, *75*, 2382 – 2391.
101. F Brook, M. A., Laronde, F. J., Ragheb, A., *Controlling Silica Surfaces Using Responsive Coupling Agents*, *Colloid Polym. Sci.* **2003**, *281*, 391–400, invited manuscript.
99. F M. Mohamed, M. A. Brook, *Allylsilane-Modified Amino Acids from the Claisen Rearrangement*, *Helv. Chim. Acta* **2002**, *85*, 4165-4181 invited manuscript
98. F P. Zelisko, M. A. Brook, *Stabilization of α-Chymotrypsin and Lysozyme Entrapped in Water-In-Silicone Oil Emulsions*, *Langmuir*, **2002**, *18*, 8982-8987.
97. F. Gang Hu, Frank LaRonde and Michael A. Brook, *Amino Acid-Terminated Silicones*, *Silicon Chem.* **2002**, *1*, 215–222.
96. F. Michael A. Brook, Paul M. Zelisko, Maeghan J. Walsh and Janinne N. Crowley, *Silicone-protein surfactants: stability of water-in-silicone oil emulsions*, *Silicon Chem.* **2002**, *1*, 99–106.
95. F M. S. Eikeland, M.-B. Hägg, Michael A. Brook, M. Ottøy, A. Lindbråthen, *Durability of Poly(dimethylsiloxane) when exposed to Chlorine Gas, J. Appl. Poly. Sci. A.*, **2002**, *85*, 2458-2470.
94. F Brook, M. A.; Ragheb, A. *Oxidizable Coupling Agents: Introduction of Surface Functionality, J. Adhesion*, **2002**, *78*, 521-541.
93. F Gilles Sèbe and Michael A. Brook, *Hydrophobization of Wood Surfaces: Covalent Grafting of Silicone Polymers*, *Wood Sci. Tech.* **2001**, *35*, 269-282.
92. C Mohamed, M.; Brook, M. A. *Synthesis of Allylsilane-Containing Amino Acids via the Claisen Rearrangement*, *Tetrahedron Lett.* **2001**, *42*, 191-193.
91. F Mustafa Mohamed and Michael A. Brook, *Photolysis of Tris(trimethylsilyl)silane: Trapping of Sisyl Radicals*, *Can. J. Chem.* **2000**, *78*, 1357-1362.

90. N Bain, A., Brook, M. A.; Hazendonk, P.; Reid, D. L.; Stan, R. S. *Analysis of NMR Spectra of Some Dimethylsilanes*, *Magn. Res. Chem.* **2000**, *38*, 894-895.
89. F Vasiliki Bartzoka, Gladys Chan and Michael A. Brook, *Protein-Silicone Synergism at Liquid/Liquid Interfaces, Langmuir* **2000**, *16*, 4589-4593.
88. F Sonya Balduzzi, Krista Kerr and Michael A. Brook, *Alkoxyallylsilanes: Functional Protecting Groups*, *Tetrahedron* **2000**, *56*, 1617-1622.
87. F Stradiotto, M.; Brook, M. A.; McGlinchey, M. J. *The Molecular Dynamics and Reactivity of Tris(1-Indenylsilane): An NMR Spectroscopic and X-ray Crystallographic Study*, *J. Chem. Soc., Perkin Trans. 2*, **2000**, 611–618.
86. F Stradiotto, M.; Hazendonk, P.; Bain, A. D.; Brook, M. A.; McGlinchey, M. J. *Probing the Effect of Organic and Organometallic Functionalization on [1,5]-Silicon Shifts in Indenylsilanes*, *Organometallics*, **2000**, *19*, 590-601.
85. F LaRonde, F. J.; Brook, M. A. *Stereoselective Reduction of Ketones Using Extracoordinate Silicon: C_2-Symmetric Ligands, Inorg. Chim. Acta* **1999**, *296*, 208-221.
84. C M. R. McDermott, M. A. Brook, V. Bartzoka, *Adjuvancy effect of different types of silicone gel* (Letter to the Editor commenting on the paper by Naim *et al.* (*J. Biomed. Mater. Res.* **1997**, *37*, 5341), *J. Biomed. Mater. Res.* **1999**, *46*, 132-133.
83. F Michael A. Brook, Christine Gottardo, Sonya Balduzzi and Mustafa Mohamed, *The Photolytic and Hydrolytic Lability of Sisyl ($Si(SiMe_3)_3$) Ethers: A Fluoride Resistant, Photolabile Alcohol Protecting Group*, *Tetrahedron* **1999**, *55*, 10027-10040.
82. F James A. Dunn, William J. Hunks, Ralph Ruffolo, Suzie S. Rigby, Michael A. Brook, and Michael J. McGlinchey *Metal Cluster Stabilized Fluorenyl, Indenyl, and Cyclopentadienyl Antiaromatic Cations: An NMR and X-ray Crystallographic Study, Organometallics* **1999**, *18*, 3372–3382.
81. C Frank J. Laronde and Michael A. Brook, *Stereoselective Reduction of Ketones By Histidine:Alkoxysilane Complexes*, *Tetrahedron Lett.* **1999**, *40*, 3507-3510.
80. F Stradiotto, M.; Brook, M. A.; McGlinchey, M. J. *The Molecular Dynamics and Cycloaddition Chemistry of Tris(1-Indenyl)allylsilane: Generation of the First Crystallographically-Characterised Tris(benzonorbonrnyl)silane*, *New J. Chem.* **1999**, 317-321.
79. R Vasiliki Bartzoka, Mark R. McDermott and Michael A. Brook *Protein-Silicone Interactions*, *Advan. Mater.* **1999**, *11*, 257-259.
78. F Heritage, P. L.; Underdown, B. J.; Brook, M. A.; and McDermott, M. R.; *Oral Administration of Polymer-Grafted Starch Microparticles Activates Gut-Associated Lymphocytes and Primes Mice for a Subsequent Systemic Antigen Challenge*, *Vaccine* **1998**, *16*, 2010-2017.
77. N Brook, M. A.; Urschey, J.; Stradiotto, M. *Hexacarbonyldicobalt-Complexed 1,2-Dioxa-2-Silacycloheptynes*, *Organometallics* **1998**, *17*, 5342-5346.
76. F Ruffolo, R.; Brook, M. A.; McGlinchey, M. J. *Metal-Mediated Allyl Transfers in (Alkynyl-allylsilane)$Co_2(CO)_6$ Complexes: A Synthetic and Structural Study*, *Organometallics* **1998**, *17*, 4992-4996.

75. F Paul A. Charpentier, Shiping Zhu, Archie E. Hamielec and Michael A. Brook, *Continuous Solution Polymerization of Ethylene Using Metallocene Catalyst System, Cp_2ZrCl_2/MMAO/TMA, Ind. Chem. Eng. Res.* **1997**, 36, 5074-5082.
74. F McDermott, M. R.; Heritage, P. L.; Bartzoka, V.; Brook, M. A. *Polymer-grafted Starch Microparticles for Oral and Nasal Administration, Immunol. Cell Biol.* **1998**, *76*, 256-262.
73. C Stradiotto, M.; Brook, M. A.; McGlinchey M. J. *Can metal clusters assist silicon migrations? An NMR spectroscopic and X-ray crystallographic study, Inorg. Chem. Commun.* **1998**, *1*, 105-108.
72. F Charpentier, P. A.; Hamielec, A. E.; Zhu, S.; Brook, M. A., *Effect of Aluminoxane on Semi-Batch Polymerization of Ethylene Using Zirconocene Dichloride, Polymer*, **1998**, *39*, 6501-6511.
71. F Vasiliki Bartzoka, Michael A. Brook, and Mark R. McDermott, *Silicone-Protein Films: Establishing the Strength of the Protein-Silicone Interaction, Langmuir* **1998**, *14*, 1892-1898.
70. F Vasiliki Bartzoka, Michael A. Brook, and Mark R. McDermott, *Protein-Silicone Interactions: How Compatible Are The Two Species? Langmuir* **1998**, *14*, 1887-1891.
69. F Howard A. Ketelson, Robert Pelton, and Michael A. Brook, *Surface and Colloidal Properties of Hydrosilane Modified Stöber Silica, Colloids and Surfaces A* **1998**, *132*, 229-239.
68. F Heritage, P. L.; Brook, M. A.; Underdown, B. J. and McDermott, M. R.; *Intranasal Immunization with Polymer-Grafted Microparticles Activates the Nasal-Associated Lymphoid Tissue and Draining Lymph Nodes, Immunology* **1998**, *93*, 249-256.
67. F Michael A. Brook and Tomislav M. Stefanac, *Hydrovinylsilanes for Sequential Radical Reactions: A New Route to Block Copolymers, Heteroatom Chem.* **1998**, *9*, 241-251.
66. F Le Roux, C.; Yang, H.; Wenzel, S.; Brook, M. A. *Using "Anhydrous" Hydrolysis to Favor Formation of Hexamethylcyclotrisiloxane from Dimethyldichlorosilane, Organometallics* **1998**, *17*, 556-564.
65. Ralph Ruffolo, Sabine Kainz, Hari K. Gupta, Michael A. Brook, and Michael J. McGlinchey, *A Synthetic and Structural Study on Metal Cluster Complexes of Allyl-Alkynyl-Silanes: Does Protonation Lead to Metal-Stabilized Silyl Cations?, J. Organomet. Chem.* **1997**, *547*, 217-226.
64. F Lau, W. W. Y.; Finlayson, J.; Dickson, J. M.; Jiang, J.; Brook, M. A. *Pervaporation performance of oligosilylstyrene-polydimethylsiloxane membrane for separation of organics from water. J. Membr. Sci.* **1997**, *134*, 209-217.
63. F Michael A. Brook, Jianxiong Jiang, Philippa Heritage, Brian Underdown and Mark R. McDermott, *Silicone-Protein Interaction at the Interface between a Functional Silicone and a Protein/Starch Microparticle, Colloids and Surfaces B: Biointerfaces* **1997**, *9*, 285-295.
62. F Michael A. Brook, Jianxiong Jiang, Philippa Heritage, Vasiliki Bartzoka, Brian Underdown and Mark R. McDermott, *The Silicone-Protein Interaction at the*

Interface between a Functional Silicone and a Protein/Starch Microparticle, Langmuir **1997**, *13*, 6279-6286.

61. F. Stradiotto, M.; Hughes, D. W.; Bain, A. D.; Brook, M. A.; McGlinchey, M. J., *The Fluxional Character of (η^5-C_5H_5)Fe(CO)$_2$(η^1-C_9H_7): Evidence for the [4+2] Cycloaddition of a Metal-Substituted Isoindene with Tetracyanoethylene, Organometallics* **1997**, *16*, 5563-5568.
60. F T. Kuhnen, M. Stradiotto, R. Ruffolo, D. Ulbrich, M. J. McGlinchey and Michael A. Brook, *Oligo(alkynylsilanes): Templates for Organometallic Polymers, Organometallics* **1997**, *16*, 5048-5057.
59. F T. Kuhnen, M. Stradiotto, R. Ruffolo, D. Ulbrich, M. J. McGlinchey and Michael A. Brook, *Using Hydrosilylation To Assemble Organometallic Polymers Containing Combinations of Silicon-Based Functional Groups, Organometallics* **1997**, *16*, 5042-5047.
58. C Brook M. A.; Gottardo, C.; Balduzzi, S.; Mustafa, M. *The Sisyl (tris(Trimethylsilyl)sil yl) Group: A Fluoride Resistant, Photolabile Alcohol Protecting Group, Tetrahedron Lett.* **1997**, *38*, 6997-7000.
57 F Michael A. Brook, Howard A. M. Ketelson, F. LaRonde and Robert H. Pelton, *Pt^0 compounds bound in a silsesquioxane layer: active hydrosilation catalysts protected by the gel, Inorg. Chim. Acta* **1997**, *264*, 125-135, (invited manuscript).
56. F Yeom, C.-K.; Dickson, J. M.; Brook, M. A. *A Characterization of PDMS Pervaporation Membranes for the Removal of Trace Organic from Water, Korean. J. Chem. Eng.* **1996**, *13*, 482-488.
55. F Stephen Urquhart, Cássia C. Turci, Tolek Tyliszczak, Michael A. Brook and Adam P. Hitchcock, *Core Excitation Spectroscopy of Phenyl- and Methyl-Substituted Silanol, Disiloxane and Disilane Compounds: Evidence for π Delocalization Across the Si-C_{Phenyl} Bond, Organometallics*, **1997**, *16*, 2080-2088.
54. C Mark J. Stradiotto, Grant Crowe, Ralph Ruffolo and Michael A. Brook, *The Structure of 1-Styrylsilatrane, Acta Cryst.* **1997**, *C53*, 637-639.
53. F Mark Stradiotto, Suzie S. Rigby, Donald W. Hughes, Michael A. Brook, Alex D. Bain and Michael J. McGlinchey, *A Multidimensional NMR Study or Tris(indenyl)methylsilane: Molecular Dynamics Mapped onto a Hypercube, Organometallics.* **1996**, *15*, 5645-5652.
52. F Michael A. Brook, Bjørn Ramacher, Carol Dallaire, Hari K. Gupta, Dagmar Ulbrich and Ralph Ruffolo, *Comparing the Reactivity to Acids of Group 14 Tetrakis(alkynes) and Their Dicobalthexacarbonyl Complexes, Inorg. Chim. Acta*, **1996**, *250*, 49-57, invited manuscript.
51. F Michael J. Roth, Michael A. Brook and Helen B. Penny, *Hydrosilane Cleavage Reactions Accelerated By Tartaric Acid and Dimethyl Sulfoxide, J. Organomet. Chem.*, **1996**, *521*, 65-74, invited manuscript dedicated to Robert Corriu.
50. F Christopher Roos, Graham A. McGibbon and Michael A. Brook, *The Thermolysis of ε-Halodisilanes: An Attempt to Coerce Si=O Bond Formation Using Si-F Bond Formation, Can. J. Chem.* **1996**, *74*, 1470-1479.

49. C Michael A. Brook, Howard A. M. Ketelson, Robert H. Pelton, and Yew. M. Heng, *Surface Nucleation of Silica-Supported Platinum Nanoparticles*, *Chem. Mater.* **1996**, *8*, 2195-2199.
48. F Tomislav M. Stefanac, Michael A. Brook, and R. Stan, *The Radical Reactivity of Hydrovinylsilanes: Homooligomers*, *Macromolecules* **1996**, *29*, 4549-4555.
47. F Wan Zhang, John A. Stone, Michael A. Brook and Graham A. McGibbon, *Stabilization of Vinyl Cations by β-Silicon: A Quantitative Mass Spectrometric Study*, *J. Am. Chem. Soc.* **1996**, *118*, 5764-5771.
46. F Howard A. Ketelson, M. A. Brook and R. H. Pelton, *Colloidal Stability of Stöber Silica in Acetone-Water Mixtures*, *J. Colloid Interface Sci.* **1996**, *179,* 600-607.
45. F R. Pelton, Huining Xiao, Michael A. Brook and Archie Hamielec, *The flocculation of polystyrene latex with mixtures of poly(p-vinyl phenol) and poly(ethylene oxide)*, *Langmuir*, **1996**, *12*, 5756-5762.
44. F P.L. Heritage, L. M. Loomes, J. Jiang, M.A. Brook, B.J. Underdown and M.R. McDermott, *Novel Polymer-Grafted Starch Microparticles for Mucosal Delivery of Vaccines*, *Immunology*, **1996**, *88*, 162-168.
43. F Howard A. Ketelson, M. A. Brook and R.H. Pelton, *Colloidal Stability of Stöber Silica in Acetone*, *Langmuir*, **1996**, *12,* 1134-1140.
42. F Michael A. Brook and Courtney Henry, *Competitive Acylation Of Arylstyrylsilanes: Controlling Silanucleophile Reactivity*, *Tetrahedron* **1996**, *52*, 861-868.
41. F Michael A. Brook, Thomas Sebastian, Peter Hülser, Ralf Jüschke, Stefan Wenzel, Jennifer A. Townsend and Patricia R. Falletta, *β-Trichlorosilylstryene Oligomers*, *Can. J. Chem.*, **1995**, *73*, 1794-1802.
40. F Michael A. Brook, Courtney Henry, Elizabeth Jefferson, Ralf Jüschke, Thomas Sebastian, Mirek Tomaszewski and Stefan Wenzel, *Electrophilic Additions to Styrylsilanes: The Effect of Changing the Ligands on Silicon*, issue dedicated to Raymond Calas, *Bull. Soc. Chim. Fr.* **1995**, *132*, 559-568, invited manuscript.
39. F H. A. M. Ketelson, Michael A. Brook, and Robert H. Pelton, *Colloidal Silica Bearing Hydrosilane Groups*, *Chem. Mater.* **1995**, *7*, 1376-1383.
38. F Howard A.M. Ketelson, Michael A. Brook and Robert H. Pelton, *Sterically stabilized silica colloids: Radical grafting of poly(methyl methacrylate) and Hydrosilylative grafting of silicones to Functionalized Silica*, *Polym. Adv. Technol.* **1995**, *6*, 335-344.
37. F Ralph Ruffolo, Andreas Decken, Luc Girard, Hari K. Gupta, Michael A. Brook and Michael J. McGlinchey, *Toward Metal-Stabilized Silylium Cations: An EHMO Study of* $[(HC{\equiv}C\text{-}SiH_2)Co_2(CO)_6]^+$ *and X-ray Crystal Structures of* $(Me_3C{\equiv}CSiPh_2H)Mo_2(CO)_4Cp_2$ *and* $[(Me_3SiC{\equiv}CSiMe_2)Co_2(CO)_6]_2$, *Organometallics* **1994**, *13*, 4328-4335.
36. F Courtney Henry and Michael A. Brook, *Proton Additions to Silylstyrenes: Overcoming the Prediliction for Protiodesilylation*, *Tetrahedron*, **1994**, *50*, 11379-11390.
35. F Jianxiong Jiang, Michael A. Brook and J. M. Dickson, *A* ^{29}Si *NMR Study of the Solution Reactions Between Methyltrichlorosilane and*

Octamethylcyclotetrasiloxane in the Presence of Triflic Acid, *Heteroatom Chemistry*, **1994**, *5*, 275-285.

34. F Courtney Henry and Michael A. Brook, *Electrophilic addition to styrylsilanes: Sequential carbon-carbon bond forming reactions*, *Inorg, Chim. Acta* **1994**, *220*, 145-154.
33. C Michael A. Brook, Henk Hiemstra and Grant Crowe, *Allyldimethylsilyl Triflate: A Self-Catalyzed Silyl Nucleophile*, *Can. J. Chem.*, **1994**, *72*, 264-267.
32. C Michael A. Brook, Daniel Chau, Michael J. Roth, Weifeng Yu and Helen Penny, *The Surprising Reactivity of Alkoxyhydrosilanes Towards α-Hydroxy Carboxylic Acids*, *Organometallics*, **1994**, *13*, 750-752.
31. F Carol Dallaire, Michael A. Brook, Alex D. Bain, Christopher S. Frampton and James F. Britten, *Tetrakis[(Trimethylsilyl)Ethynyl] Group 14 Metal Derivatives: An Examination Of The Electronic Interaction Between Two Group 14 Metals Connected By An Acetylene Wire*, *Can. J. Chem.* **1993** *71*, 1676-1683.
30. F Eric C. Roos, M. Carmina López, Michael A. Brook, Henk Hiemstra and W. Nico Speckamp, *Synthesis of α-Substituted α-Amino Acids via Cationic Intermediates*, *J. Org. Chem.* **1993**, *58*, 3259-3268.
29. F Carol Dallaire and Michael A. Brook, *The β-Effect with Vinyl Cations: A Kinetic Study of the Protiodemetallation of Silyl, Germyl and Stannyl Alkynes*, *Organometallics* **1993**, *12*, 2332-2338.
28. N Michael A. Brook, Pankaj Modi and James M. Dickson, *Silicon Functionalized Styrene Polymers*, *Macromolecules* **1993**, *26*, 2624-2627.
27. F Michael A. Brook, Courtney Henry, Ralf Jueschke and Pankaj Modi, *Balancing Leaving Group Ability and the β-Effect: Exploring the Synthetic Utility of Chlorosilyl Groups*, *Synlett* **1993**, *2*, 97-104.
26. C Graham A. McGibbon, Michael A. Brook and Johan K. Terlouw, *The Gas Phase Determination of the Stabilization Energy for α- and β-Silyl Substituents on Vinyl Cations by Mass Spectrometry*, *J. Chem. Soc., Chem. Commun.* **1992**, 360-362.
25. F Robert H. Pelton, Andrea Osterroth and Michael A. Brook, *Silicone Stabilized Poly(methyl methacrylate) Nonaqueous Latex. 2 Flocculation By Degradation of the Steric Layer*, *J. Colloid Interface Sci.* **1991**, *147*, 523-530.
24. C Michael A. Brook, Thomas Sebastian, Ralf Jueschke and Carol Dallaire, *The Diastereoselective Addition of Carbon Electrophiles to Styrylsilanes: The Dimerization of β-E-Halosilylstyrenes*, *J. Org. Chem.* **1991**, *56*, 2273-2274.
23. C Michael A. Brook and Carol Dallaire, *Vinyl Cations Stabilized by Silyl, Germyl and Stannyl Groups: An Examination of the β-Effect*, *Organometallics* **1990**, *9*, 2873-2875.
22. F Michael A. Brook and Axel Neuy, *The β-Effect: Changing the Ligands on Silicon*, *J. Org. Chem.* **1990**, *55*, 3609-3616.
21. F Robert H. Pelton, Andrea Osterroth and Michael A. Brook, *Silicone Stabilized Poly(methyl methacrylate) Nonaqueous Latexes*, *J. Colloid Interface Sci.* **1990**, *137*, 120-127.

20. F Albert Elmer and Michael A. Brook, *Draw2D, Draw3D: MOPAC 2- and 3-Dimensional Graphical Output Written Using the PHIGS Graphics Standard, Tetrahedron Computer Method.* **1990**, *2*, 223-232.
19. C Michael A. Brook, Peter Hülser and Thomas Sebastian, *Oligo(trichlorosilyl)styrenes: Highly Functionalized Silicone Precurors, Macromolecules* **1989**, *22*, 3814-3816.
18. C Michael A. Brook, Mahmud A. Hadi and Axel Neuy, *An Examination of the β-Effect in an Addition Reaction with Different Ligands on Silicon, J. Chem. Soc., Chem. Commun.* **1989**, 957-958.
17. C Michael A. Brook, Christina H. Kremers, Thomas Sebastian and Weifeng Yu, *A Novel Glycol-Silicone Polymer, J. Poly. Sci., Polymer Lett.* **1989**, *27*, 229-234.
16. C Michael A. Brook, Romolo Faggiani, C.J.L. Lock and Dieter Seebach, *u,l-4a,5,6,7,8,8a-Hexahydro-4-phenyl-8a-(trimethylsiloxy)-4*H*-1,2-benzoxazine-2-oxide, Acta Cryst.* **1988**, *C44*, 1981-1984.
15. C Pierre G. Potvin, Patrick C.C. Kwong and Michael A. Brook, *Solution Structures of Sharpless Epoxidation Catalysts, J. Chem. Soc., Chem. Commun.*, **1988**, 773-775.
14. F Nick Henry Werstiuk, Michael A. Brook and Peter Hülser, *Thermolysis of Trimethylsilyl Esters: An Ultraviolet Photoelectron Study, Can. J. Chem.* **1988**, *66*, 1430-1439.
13. C Michael A. Brook and Jahangir, *The Activation of Imines to Attack by Grignard Reagents, Synth. Commun.* **1988**, *18*, 893-898.
12. F Jahangir, Michael A. Brook, David B. MacLean and Herbert H. Holland, *A New Route to the Indolopyridonaphthyridine Ring System: Synthesis of* N*-Benzyl-13b,14-dihydronaucléfine and* N*-Benzyl-13b,14-dihydroaugustine, Tetrahedron* **1987**, *43*, 5761-5768.
11. F Jahangir, M.A. Brook, D.B. MacLean, and H. L. Holland, *8*H*-Isoquino[2,1-b][2,7]naphthyridine-8-ones: synthesis of the* Alangium *alkaloids, alangimaridine and alangimarine, Can. J. Chem.* **1987**, *65*, 2362-2368.
10. R Michael A. Brook, *The Nomenclature of Relative Stereochemistry: Choosing Between* likes *and* preferences, *J. Chem. Educ.* **1987**, *64*, 218-220.
9. C Jahangir, D.B. MacLean, M.A. Brook and H.L. Holland, *Activated Imines as Carbon Electrophiles: Applications in Alkaloid Synthesis, J. Chem. Soc., Chem. Commun.* **1986**, 1608-1609.
8. F Michael A. Brook and Dieter Seebach, *Cyclic Nitronates from the Diastereoselective Addition of 1-Trimethylsilyloxycyclohexene to Nitroolefins. - Starting Materials for Stereoselective Henry Reactions and 1,3-Dipolar Cycloadditions, Can. J. Chem.* **1987**, *65*, 836-850.
7. C T.H. Chan and M.A. Brook, *INEPT-29Si NMR Study of a TiCl4-Mediated Reaction of an Enol Silyl Ether, Tetrahedron Lett.* **1985**, 2943-2947.
6. C Dieter Seebach and Michael A. Brook, *Reversed Stereochemical Course of the Michael Addition of Cyclohexanone to β-Nitrostyrenes by Using 1-Trimethylsilyloxycyclohexene /Dichlorodiisopropoxytitanium, Helv. Chim. Acta* **1985**, *68*, 319-324.

5. C S.D. Lee, Michael A. Brook and T.H. Chan, *Conversion of Primary Amides into Active Acylating Agents via Acylpyrroles*, *Tetrahedron Lett.* **1983**, 1569-1572.
4. F P. Brownbridge, T.H. Chan, M.A. Brook and G.J. Kang, *Chemistry of Silyl Enol Ethers. A General Synthesis of 3-Hydroxyhomophthalates and a Biomimetic Synthesis of Sclerin*, *Can. J. Chem.* **1983**, *61*, 688-693.
3. C T. H. Chan, Michael A. Brook and T. Chaly, *A Simple Procedure for the Acetalization of Carbonyl Compounds*, *Synthesis* **1983**, 203-205.
2. C Michael A. Brook and T.H. Chan, *A Simple Procedure for the Esterification of Carboxylic Acids*, *Synthesis* **1983**, 201-203.
1. F M.A. Nazar, W.H. Rapson, M.A. Brook, S. May and J. Tarhanen, *Mutagenic Reaction Products of the Aqueous Chlorination of Catechol*, *Mutat. Res.* **1981**, 89, 45-55.

(d) Journal Abstracts

(e) Other, Including Proceedings of Meetings

9. F Zhang Zheng, Yang Chen, Richard J. Hodgson, Michael A. Brook* and John D. Brennan, *Macroporous Silica Monoliths Derived from Glyceroxysilanes: Controlling Gel Formation and Pore Structure*, *Macromol. Symp.* **2005**, *226,* 253-261.
8. R Muxin Liu, Elodie Pacard, Amro M. Ragheb, Paul M. Zelisko and Michael A. Brook, Stabilisation of Protein-Containing Water-in-Oil Emulsions, *Cahiers de Formulation*, **2004**, *11*, 152-162 (Developed from the conference, "Formulation des composés silicones et fluorés" presented at the Journées de formulation: Formulation des composés silicones et fluorés: Concurrence ou complémentarité Lyon, France 9, 10 décembre 2002), Lanteri, P.; Bordes, C., Eds., invited manuscript.
7. Amro Ragheb, Hong Chen, Meghan L. Marshall, Michael Hrynyk, Heather Sheardown and Michael A. Brook, Controlling Protein Deposition at Silicone Elastomer Interfaces, *Polym. Prep. (Amer. Chem. Soc., Div. Polym. Chem.)* **2004**, *45(1)*, 602-603.
6. C Paul M. Zelisko, Jill J. Coo-Ranger, and Michael A. Brook, *The Interaction of Proteins with Functionalized Silicones*, *Polym. Prep. (Amer. Chem. Soc., Div. Polym. Chem.)* **2004**, *45(1)*, 604-605.
5. C Jill J. Coo-Ranger, Paul M. Zelisko, Michael A. Brook, *Ionic silicone surfactants in water-in-silicone oil emulsions containing proteins. Polym. Prep. (Amer. Chem. Soc., Div. Polym. Chem.)* **2004**, *45(1)*, 674-675.
4. F Brook, Michael A.; Zelisko, Paul; Walsh, Meaghan. *Permeability of silicone - water interfaces in water-in-oil emulsions. Organosilicon Chemistry V: From Molecules to Materials*, [Scientific Contributions presented at the European Silicon Days], 1st, Munich, Germany, Sept., 2001 (2003), Meeting Date 2001, 606-611, invited manuscript.
3. F Paul Zelisko, Vasiliki Bartzoka and *Michael A. Brook*, *Exploiting Favorable Silicone-Protein Interactions: Stabilization Against Denaturation At Oil-Water Interfaces*, in *Synthesis and Properties of Silicones and Silicone-Modified*

Materials, Clarson, S. J.; Fitzgerald, J. J.; Owen, M. J.; Smith, S. D.; Van Dyke, M. E., Eds, ACS Symposium Series 838, 2003, Ch. 19, pp. 212-221, invited manuscript (*ISBN 0-8412-3804-9*).

2. C Paul M. Zelisko, and Michael A. Brook, *Modified silicones for the stabilisation of proteins and enzymes in emulsions: Potential Vaccine Delivery Systems*, *Polym. Prep. (Am. Chem. Soc., Div. Polym. Chem.)*, **2001**, *42*(2), 115-116.
1. N Michael A. Brook and Paul Zelisko, *Exploiting Silicone-Protein Interactions: Stabilization Against Denaturation At Interfaces, Polym. Prep. (Am. Chem. Soc., Div. Polym. Chem.)*, **2001**, *42*(1), 97-98.

Patents

Provisional (Note: Provisional Patents superceded by a full patent are not shown)

14. Brook, M. A.; Gonzaga, F.; Tian, H. *Chelating Silicon-Based Polymers*, US Provisional Patent Application (to McMaster University), in preparation.
13. Sheardown, H.; Brook, M. A.; Chen, H. Biocompatible Silicone and Methods of Preparation, US Provisional Patent Application (to McMaster University).

Brook, Michael A.; Sheardown, Heather; Chen, Hong. Biological molecule-reactive hydrophilic silicone surface. PCT Int. Appl. (2005), 62 pp. CODEN: PIXXD2 WO 2005111116 A1 20051124 CAN 143:478680 AN 2005:1240882 CAPLUS

12. Sébe, G., Thompson, D. B.; Brook, M. A., *Silicone Hydrophobization of Polysaccharides*, US Provisional Patent Application (to McMaster University).

Full, Filed

11. Dong, H.; Brook, M.A.; Brennan, J.D. *Methods for Forming Macroporous Monolithic Methylsilsesquioxanes*. PCT and US patents filed April 29, 2005.
10. Besanger, T.R.; Hodgson, R.J.; Brook, M.A.; Brennan, J.D. *Methods for Substrate and Inhibitor Screening Using Enzyme-Reactor Chromatography/Tandem Mass Spectrometry*. PCT and US patents filed March 16, 2005.
9. Brennan, J.D.; Brook, M.A.; Besanger, T.R. *Method of Immobilizing Membrane-Associated Molecules*. Continuation in Part to Application 60/426,018, filed April 2, 2004.
8. Besanger, T.; Brook, M.A.; Brennan, J.D. *Method of Immobilizing of Membrane-Bound Proteins*. U.S. Patent Application No. 10/712,015 and PCT Patent application PCT/CA03/01757; filed November 14, 2003.
7. Zhang, Z.; Cruz-Aguado, J. A.; Hodgson, R. J.; Tleugabulova, D.; Brennan, J. D.; Brook, M. A. . U.S. Patent Application (Continuation in Part). Filed April 1, 2004.
6. Zhang, Z.; Chen, Y.; Brennan, J. D.; Brook, M. A. *Methods and Compounds for Controlling the Morphology and Shrinkage of Silica Derived from Polyol-Modified Silanes*. U.S. Patent Application and PCT Patent application PCT/CA03/01257; Filed August 23, 2003.
5. Brook, M.A.; Brennan, J.D.; Chen, Y. *Polyol-Modified Silanes as Precursors for Silica*. U.S. Patent Application No. 10/449,511 and PCT application PCT/CA03/00790; Filed May 31, 2003.

4. Ketelson, H.; Brook, M.A. *Cleaning formulation for Optical Surfaces*, U.S. patent appl. Ser. No. 60/207,187, 20020039984 Oct. 2000. and PCT appl. PCT/CA01/00742 Nov. 29 2001.

Granted

3. Stan, R. S.; Brook, M. A. *Chelating silicone polymers,* US Patent 6,566,322 (to McMaster University).
1. M. A. Brook, L. Loombs, P. Heritage, J. Jiang, M. McDermott, B. Underdown, Microparticle Delivery System, US Patent 5571531, Nov. 5, 1996.

Abandoned

2. Howard A. M. Ketelson, Michael A. Brook, and Robert H. Pelton, A Platinum Catalyst, Method of Making and Use of Thereof, US Provisional Patent Application: 60/025,365, Sept. 3, 1996, abandoned.

Not Peer Reviewed

(a) Books

1 M.A. Brook and B.E. McCarry, Laboratory Safety Manual, Department of Chemistry, McMaster University, McMaster University, 1986.

(b) Contributions to Books

(c) Journal Articles

(d) Journal Abstracts

(e) Other, Including Proceedings of Meetings

3 Book Review in Canadian Chemical News, 1997, *49 (6)*, 39, "Organosilicon Chemistry II: from molecules to materials," Auner, N.; Weis, J. Eds., VCH : Weinheim and NY, 1996.

2 Software Review in Canadian Chemical News, 1992, *44*(1), 19-20 of ISIS/Draw from Molecular Design.

1 Book Review in Canadian Chemical News, 1987, *39*(10) Nov., 31.9, of "Silanes, Surfaces and Interfaces, in Chemically Modifed Surfaces, Vol. I, By Donald E. Leyden, Gordon and Breach, 1986.

Presentations at Meetings

Invited

16. Michael A. Brook, J. Guo, H. D. Sheardown, H. Chen, D. Chen, *Carbohydrate Modified Silicone Elastomers*, ISOS XIV International Organosilicon Symposium, Würzburg Germany, August 2005.
15. Michael A. Brook, *Protein and oligonucleotide compatible sol-gel preparation and controlled aggregation of primary silica particles*, IUPAC World Polymer Congress, Paris, July 2004.
14. Michael A. Brook, Hong Chen, and Heather Sheardown, *Protein Rejecting Silicone Elastomers for Scar Reduction in the Eye*, Emerging New Materials Research Day, Toronto, June 2003.
13. Michael A. Brook, Stefanie Mortimer, Cindy Liu and Paul Zelisko, *Formulating Emulsions Using Silicone-Protein Copolymers*, International Workshop on Silicon Containing Polymers ISPO 3 Troy, NY, 2003.

12. M. A. Brook, J. D. Brennan, D. Chen, H. Chen, Z. Zheng, P. Zelisko, S. Mortimer and A. Ragheb, *Harnessing Protein Activity at Silica and Silicone Interfaces,* 36th Organosilicon Symposium, Akron, May 2003.
11. Muxin Liu, Elodie Pacard, Amro Ragheb, Paul Zelisko et Michael A. Brook, *Emulsion de silicone eau dans huile : stabilisation par des protéines*, Journées de formulation: Formulation des composés silicones et fluorés: Concurrence ou complémentarité Lyon, France 9, 10 décembre 2002.
10. Michael A. Brook, Dan Chen, Kui Guo, Zhang Zheng, John Brennan, Hong Chen and Paul Zelisko, *Using silicon chemistry to stabilize proteins in silica*, XIIIth International Symposium on Organosilicon Chemistry, Guanajuato, Mexico, August 2002, Abstract A-28.
9. Michael. A. Brook, Vasiliki Bartzoka, Gladys Chan and Paul Zelisko, *Are Silicones Deleterious to Protein Structure and Function?*, 33rd Organosilicon Symposium, Saginaw MI, April 2000, Abstract B-15.
8. M. A. Brook, R. S. Stan, B. Davies, V. Bartzoka. *Combining Silicones with Biopolymers*. XIIth International Symposium on Organosilicon Chemistry, Sendai, Japan, May 1999.
7. M. A. Brook and Frank J. LaRonde, *Chiral Extracoordinate Silanes: Catalytic, Enantioselective Reduction of Carbonyl Groups*, 32nd Organosilicon Symposium, Milwaukee, March 1999.
6. M. A. Brook, R. Z. Stan and A. Tseitlin, Progress in the Chemistry of Surface Compability, 5th International Conference on Woodfiber-Plastic Composites, Toronto, ON, May 1998, Abstract.
5. M. A. Brook, T. Kuhnen, M. J. McGlinchey, R. Ruffolo, M. Stradiotto and J. Urschey, *(Metal) Complex Solutions To Some Synthetic (Silicon) Problems*, ACS Meeting, Dallas, Apr. 1998, Kipping Symposium (J. Lambert, Awardee), Abstract 279.
4. M. A. Brook, Sonya Balduzzi, Vasiliki Bartzoka, Gang Hu, Frank LaRonde, Gilles Sèbe and Rodica Stan, *Modifying Biopolymers with Silanes and Silicones*, ACS Northeast Regional Meeting, Midland MI, May 1997, Abstract 143.
3. Michael A. Brook, David A. Valentini, Rodica Stan, Vasiliki Bartzoka and Gilles Sèbe, *Approches to the Dimensional Stabilization of Wood: Hydrophobization*, Design Industriel, Architecture et Rhéologie du Bois, Bordeaux, France, March 1997.
2. M. A. Brook, H. A. M. Ketelson, C. Gottardo and R. H. Pelton, *Particles in a Box: Hydrosilation Catalyzed by Platinum Nanoparticles Enmeshed in a Silsesquioxane Gel*, 9th International Organosilicon Conference, Montpellier, France, Sept. 1996, Abstract LD8.
1. M.A. Brook, H. Ketelson and R.H. Pelton, (Polymer Colloids Symposium), *Controlled Modification of Silica Surfaces: Polyolefin and Silicone Sterically Stabilized Colloids*, 78th Canadian Society for Chemistry Conference, Guelph, 1995, Abstract 253.

Contributed

a) Peer Reviewed

159. F. Gonzaga, M. A. Brook, *Structuring noble metals nanoparticles in multilayered silicone surfactants*, 89th Conference of The Canadian Society for Chemistry, Halifax NS, May 2006, Abstract.
158. Lucy Ye, Michael Brook, Robert Pelton, *Biotinylation of TiO2 nanoparticles and their colloidal stability*, 92nd Annual Meeting Paperweek 2006, Montreal, QC, Canada, poster.
157. Lucy Ye, Michael Brook, Robert Pelton, *A Platform of Immobilization of Proteins on TiO2 Nanoparticles*, 92nd Annual Meeting Paperweek 2006, Montreal, QC, Canada, oral presentation.
156. Lucy Ye, Michael Brook, Robert Pelton, *Biotinylation of TiO2 Nanoparticles and Their Colloidal Stabilities* February 6~10, 2006, 55th Canadian Chemical Engineering Conferernce, Toronto, Canada.
155. Peter Kovarik, Thomas R. Covey, Richard J. Hodgson, Michael A. Brook and John D Brennan*. *Compound Screening using Capillary Scale Frontal Affinity Chromatography/MALDI Tandem Mass Spectrometry.* 53rd American Society for Mass Spectrometry Conference, San Antonio, TX, 2005.
154. Gina Dimopoulos-Italiano1, Michael A. Brook, Amro M. Ragheb, M. Kirk Green. *LCMS Analysis of Squalene Derivatives using ESI with Post-Column Addition of Ag+* 53rd American Society for Mass Spectrometry Conference, San Antonio, TX, 2005.
153. R.J. Hodgson, T.R. Besanger, M.A. Brook and J.D. Brennan*. *Inhibitor Screening using Enzyme Reactor Chromatography/Tandem Mass Spectrometry.* 53rd American Society for Mass Spectrometry Conference, San Antonio, TX, 2005.
152. F. Gonzaga and M. A. Brook, *Polycarboxylate Chelating Silicone Amphiphiles*, ISOS XIV International Organosilicon Symposium, Würzburg Germany, August 2005.
151. D. B Thompson and M. A. Brook, *Silicone Protected Carbohydrates*, ISOS XIV International Organosilicon Symposium, Würzburg Germany, August 2005.
150. Lu Ye, Robert Pelton, Michael Brook, Covalent attachment of biotin to TiO_2 nanoparticles, 79th ACS colloid and surface science symposium, Potsdam, New York, USA,: June 13-15, 2005, Abstract No. 7-27.
149. Weian Zhao, Elodie Pacard, Carole Chaix, Christian Pichot and Michael A. Brook*, Controlled Silica Nanoparticle Aggregates for Oligonucleotide Synthesis, 38th Silicon Symposium,Boulder, Colorado,: June 2005, Abstract; P17
148. Gina Dimopoulos-Italiano; Michael A. Brook; Amro Ragheb; M. Kirk Green, *LCMS Analysis of Squalene Derivatives using ESI with Post-column Addition of Ag^+*, 53rd ASMS Conference on Mass Spectrometry, June 5 - 9, 2005, San Antonio, Texas, Section ThP06, Poster Number: 102.
147 Gao, Y., Amarne, H., Brook, M. A., Sheardown, H. Bandage Contact Lenses: Silicon Oil for Interfacial Control EMK Meeting: Toronto, Canada, June, 2005.
146. Elodie Pacard, Michael A. Brook, Christian Pichot, Carole Chaix , Amro M. Ragheb, *Elaboration of silica/polymer hybrid support for oligonucleotide synthesis and biodiagnostics*, IUPAC World Polymer Congress, Paris, July 2004.

145. Scott L.E., Zelisko P.M., Brook M.A. *Heparin Entrapped in Water-in-Silicone Oil Emulsions: A Possible Delivery Vehicle for Oral Heparin*, 87th Canadian Chemistry Conference, London ON May 2004, Abstract 751.
144. Ragheb A.M., Hrynyk M., Brook* M.A. *The Use of Poly(ethylene glycol) to Stabilize Enzymes in Silicone Rubber*, 87th Canadian Chemistry Conference, London ON May 2004, Abstract 162.
143. John Brennan, Michael Brook, Xiaoming Zhao, Yang Chen, Richard Hodgson, Hong Long, Dina Tleugabulova, Zheng Zhang, Blaise N'Zemba, and Michael G. Organ, *New Advances in the Screening of Compound Mixtures*, Chemistry and Biology: Partners in Decoding the Genome, The National Institutes of Health, Bethesda, Maryland, March 15-16, 2004.
142. Chen, H; Sheardown, H; Brook, MA, Generic Modification Method for Creating Biocompatible Silicone Elastomers, International Conference and Workshop on Physical Chemistry of Bio-Interfaces, Barossa Valley, Australia, May 2004.
141. Paul M. Zelisko, Lauren E. Scott, and Michael A. Brook, The Delivery of Proteins from Water-in-Silicone Oil Emulsions, International Conference and Workshop on Physical Chemistry of Bio-Interfaces, Barossa Valley, Australia, May 2004.
140. Amro M. Ragheb, Stefanie A. Mortimor, Susan Jo, Michael Hrynyk and Michael A. Brook, Silicone rubber for drug delivery applications: The effect of poly(ethylene glycol) on the drug delivery process, International Conference and Workshop on Physical Chemistry of Bio-Interfaces, Barossa Valley, Australia, May 2004.
139. Zheng Zhang, Yang Chen, Dina Tleugabalova, John D. Brennan and Michael A. Brook, Immobilization of Proteins within Silica and Bioanalysis Applications of Protein Entrapped Silica Monolith, International Conference and Workshop on Physical Chemistry of Bio-Interfaces, Barossa Valley, Australia, May 2004.
138. Paul M. Zelisko, Jill J. Coo-Ranger, and Michael A. Brook, Water-in-Silicone Oil Emulsions as Delivery Vehicles for Proteinaceous Materials, International Conference and Workshop on Physical Chemistry of Bio-Interfaces, Barossa Valley, Australia, May 2004.
137. Chen, H, Brook, MA, Sheardown, H. *Protein –rejecting Silicone Surface Immobilization of Poly(ethylene oxide) by Covalent Bonds*, 7th International Biomaterials Conference, Sydney, Australia, May 2004, Abstract 653.
136. Brook, MA, Brennan, J, Zhang, Z, Chen, D, Gao, Y. *Proteins trapped in porous silica: Biomaterials Scaffolds.* 7th International Biomaterials Conference, Sydney, Australia, May 2004, Abstract 590.
135. Zhang, Z, Chen, Y, D'souza, R, Brennan, JD, and Brook, MA, *Biocompatible Macroporous Silica Monoliths with Entrapped Proteins*, 7th International Biomaterials Conference, Sydney, Australia, May 2004, Abstract 1323
134. Ragheb, AR, Hrynyk, M, Brook, MA, *Silicone-Lipase Composite: Affecting Protein-Silicone Interaction By Tailoring The Polymeric Structure*, 7th International Biomaterials Conference, Sydney, Australia, May 2004, Abstract 1748.
133. Amarne, H., Gao, Y., Guo, J., Chen, H., Sheardown, H., Brook, M. A. Silicon Lenses for the Mitigation of Scarring in the Eye MMO and EMK Meeting: Toronto, Canada, June, 2004.

132. Zelisko, PM, Ranger-Coo, J, and Brook, MA, *Water-in-Silicone Oil Emulsions as Delivery Vehicles for Proteinaceous Materials*, 7th International Biomaterials Conference, Sydney, Australia, May 2004, Abstract 835.
131. Chen, H, Brook, MA, Sheardown, H. Controlled Morphology *PEO-Silicone Composites Have Protein Rejecting Surfaces*, 7th International Biomaterials Conference, Sydney, Australia, May 2004, Abstract 22.
130. Brook, M. A. *Breast Implant Lawsuits – A Tempest in a C-Cup?* Rotary Lunchtime Lectures, Feb. 2004, Hamilton.
129. Amro Ragheb, Hong Chen, Meghan L. Marshall, Michael Hrynyk, Heather Sheardown and Michael A. Brook, *Controlling Protein Deposition at Silicone Elastomer Interfaces*, 227th ACS National Meeting, Anaheim, CA, March, 2004.
128. Jill J. Coo-Ranger, Paul M. Zelisko, Michael A. Brook, *Ionic silicone surfactants in water-in-silicone oil emulsions containing proteins*, 227th ACS National Meeting, Anaheim, CA, March, 2004, Abstract POL 510.
127. Paul M. Zelisko, Jill J. Coo-Ranger, and Michael A. Brook, *The Interaction of Proteins with Functionalized Silicones*, 227th ACS National Meeting, Anaheim, CA, March 2004, Abstract POL 391.
126. Michael A. Brook, Paul Zelisko, Hong Chen, Muxin Liu, Amro Ragheb, Michael Hrynyk, and Heather Sheardown, *Interfacial Control with Proteins at Silicone/Water Interfaces*, Polymerisation in Dispersed Media, PDM April 2004, Lyon, France, Abstact O5.5.
125. Elodie Pacard, Michael A. Brook, Amro M. Ragheb, Carole Chaix, and Christian Pichot, *Elaboration of Silica/polymer hybrid support for oligonucleotide synthesis and biodiagnostics*, Polymerisation in Dispersed Media, PDM April 2004, Lyon, France.
124. Yang Chen, Zheng Zhang, John D. Brennan, Michael A. Brook,* *A glycerol-derived silica precursor for the encapsulation of protein in porous silica monoliths*, XII International Workshop on Sol-Gel Science and Technology, Sydney, Australia, August 2003, Abstract 788.
123 Michael A. Brook,* Yang Chen, Kui Guo, Zheng Zhang, Wen Jin, Anil Deisingh and John D. Brennan*, *Sugar-Modified Silanes: Precursors for Silica Monoliths,* XII International Workshop on Sol-Gel Science and Technology, Sydney, Australia, August 2003, Abstract O-50.
122. Masaaki Amako, Michael A. Brook, *Ring Flipping Behavior of* $O(SiMe_2\text{-}\eta^5\text{-}Indenyl)_2Fe$ *complexes and Their Co-Polymerization with Silicones*, OMCOS 12, Toronto, July 2003, Abstract.
121 Stefanie A. W. Mortimer, Paul M. Zelisko, and Michael A. Brook, *Protein Deposition On Modified Silica Surfaces,* 36th Organosilicon Symposium, Akron (won best student prize).
120. Paul M. Zelisko and Michael A. Brook, *The Properties Of Human Serum Albumin And Triethoxysilyl-Terminated Polydimethylsiloxane At The Interface Of Water-In-Silicone Oil Emulsions,* 36th Organosilicon Symposium, Akron
119. S. A. W. Mortimer, P. M. Zelisko, M. A. Brook, *A Novel Approach to Amino Acid-Modified Silicones*, 2003 IUPAC Congress and 86th Conference of The

Canadian Society for Chemistry, Ottawa ON, Aug. 2003, Abstract. (won best undergraduate student MSED poster).

118. P. M. Zelisko, M. A. Brook, *The Interaction of Proteins with Silicone Polymers Containing Hydrophilic Moieties*, 2003 IUPAC Congress and 86th Conference of The Canadian Society for Chemistry, Ottawa ON, Aug. 2003, Abstract.
117. A. M. Ragheb, M. A. Brook, *The role of hydrophilic additives in affecting the internal hydrophobic environment of silicone rubber: effect of polyethylene glycol species on the enzymatic activity of lipase C. rugosa entrapped in silicone composite*, 2003 IUPAC Congress and 86th Conference of The Canadian Society for Chemistry, Ottawa ON, Aug. 2003, Abstract. (Won 1 of 3 best graduate students posters).
116. Hong Chen, Michael A. Brook and Heather Sheardown, *A New Approach to PEO-Modified Silicone Rubber: Passivation of Silicone Surfaces for Protein Rejection and Cell Growth*, 29th Annual Biomaterials Society Meeting, Reno Nevada, May 2003, Abstract.
115. Zheng Zhang, Michael A. Brook, *The Biporous Structure of Monolithic Silica Columns Containing Entrapped Proteins*, International Symposium on Organosilicon Chemistry, Guanajuato, Mexico, August 2002, Abstract P1-60.
114. Paul M. Zelisko and Michael A. Brook, *The Interaction of Proteins and Silicones at Emulsion Interfaces: Analysis of Protein and Emulsion Stability*, International Symposium on Organosilicon Chemistry, Guanajuato, Mexico, August 2002, Abstract P1-54.
113. Amro Ragheb and Michael A. Brook, *Oxidizable Coupling Agents: Introduction of Surface Functionality*, International Symposium on Organosilicon Chemistry, Guanajuato, Mexico, August 2002, Abstract P1-58.
112. Hong Chen, Michael A. Brook, and Heather D. Sheardown, *An Investigation of the Surface Properties and Biocompatibility of Polyethylene Oxide-Modified Silicone Rubber*, International Symposium on Organosilicon Chemistry, Guanajuato, Mexico, August 2002, Abstract P1-53.
111. Elodie Pacard, Hong Chen, Michael A. Brook, and Carol Chaix, *Compatibilization of Silica Surfaces For Proteins, International Symposium on Organosilicon Chemistry*, Guanajuato, Mexico, August 2002, Abstract P2-49.
110. Cindy M. Liu, Paul Zelisko and Michael A. Brook, *Protein-Silicone Conjugates: Surface Activity as a Guide to Utility as Biodegradable Surfactants*, International Symposium on Organosilicon Chemistry, Guanajuato, Mexico, August 2002, Abstract P2-29.
109. Yang Chen and Michael A. Brook, *Syntheses of Sugar-Based Coupling Agents and their Use in Preparing Protein-Friendly Silica Surfaces*, International Symposium on Organosilicon Chemistry, Guanajuato, Mexico, August 2002, Abstract P1-57.
108. Masaaki Amako and Michael A. Brook, *Transition Metal-Containing Silicones From Disiloxane Compounds*, International Symposium on Organosilicon Chemistry, Guanajuato, Mexico, August 2002, Abstract P2-23.

107. Li, G.; LaRonde, F. J.; Brook, M. A. *Stereoselective reduction of ketones with triethoxysilane catalyzed by C2-symmetric titanium complexes*, 224th ACS Meeting, Boston, August 2002, Abstract ORGN 509
106. M. A. Brook, V. Bartzoka, P. Zelisko, M. Walsh *Silicone-Protein Copolymers: Controlling Interfacial and Protein Stabilization*, 1st European Silicon Days, Munich, 2001 Abstract B11.
105. Brook, M. A., Laronde, F. J., Ragheb, A., *Controlling Silica Surfaces Using Responsive Coupling Agents*, Silica 2001, Mulhouse, France, Sept. 2001.
104. Mohamed, M.; Brook, M. A. *Synthesis of α-Allylsilane-Amino Acids and Their Reactions With Aromatic Acetals*, 212th ACS Meeting, Chicago, August 2001, Abstract ORGN 457.
103. Paul M. Zelisko, and Michael A. Brook, Modified silicones for the stabilisation of proteins and enzymes in emulsions: Potential Vaccine Delivery Systems, 212th ACS Meeting, Chicago, August 2001, Abstract POLY 403.
102. Brook, M. A., Zelisko, P. and Bartzoka, V. *Silicone-Protein Copolymers: Controlling Interfacial and Protein Stabilization*, International Workshop on Silicon Containing Polymers ISPO 2001, University of Kent at Canterbury, UK, June 2001, Abstract 57.
101. Paul Zelisko and Michael A. Brook, *Delivery of Proteinaceous Materials from Silicone Protected Microparticles and Water-in-Silicone Oil Emulsions*, Controlled Release Society, San Diego, June 2001, Abstract 6194.
100. Mustafa Mohamed and Michael. A. Brook, 84th Canadian Society for Chemistry Conference, Montreal, 2001, Abstract 1206.
99. Amro Ragheb and Michael. A. Brook, *The Role of Light in the Fouling of Wastewater UV-Disinfection*, 84th Canadian Society for Chemistry Conference, Montreal, 2001, Abstract 693.
98. Zelisko, PM; Flora, K; Brook, MA; Brennan, JD., *The Interaction of Silicone and Human Serum Albumin: Stabilisation Against Denaturation at the Interface*, 84th Canadian Society for Chemistry Conference, Montreal 2001, Abstract 1163.
97. Mustafa Mohamed and Michael. A. Brook, *C_2-Symmetric Lewis Acids: Enantioselective Reduction Of Carbonyl Groups*, 34th Organosilicon Symposium, White Plains, NY, May 2001, Abstract C-8.
96. Amro Ragheb and Michael. A. Brook, *An Attempt To Use Oxidizable Silane Coupling Agents To Mitigate Fouling of Quartz Surfaces*, 34th Organosilicon Symposium, White Plains, NY, May 2001, Abstract B-22.
95. Paul Zelisko and Michael. A. Brook, *Proteins and Enzymes at the Interface of Water-in-Silicone Oil Emulsions*, 34th Organosilicon Symposium, White Plains, NY, May 2001, Abstract A-10.
94. Brook, M. A.; Zelisko, P. *Exploiting Silicone-Protein Interactions: Stabilization Against Protein Denaturation at Interfaces, 211th ACS Meeting, San Diego, April 2001, Abstract Poly181.*
93. Brook, M. A.; Ragheb, A. *Oxidizable Coupling Agents: Introduction of Surface Functionality*, Adhesion Society Conf., Williamsburg, VA, Feb. 2001, Abstract 373.

92. Zelisko, P.; Brook, M. A.20th Conference of the Canadian Biomaterials Society,*Water-In-Silicone Oil Emulsions in the Oral Delivery and Storage of Proteins and Enzyme*s, Hamilton, August 2000.
91. Vasiliki Bartzoka and Michael A. Brook, Stable Silicone-Protein Emulsions: New Routes to Topical Delivery of Proteins, Society of Cosmetic Chemists Conference, Toronto, ON, May 2000.
90. Frank J. LaRonde and Michael. A. Brook, *C_2-Symmetric Lewis Acids: Enantioselective Reduction Of Carbonyl Groups*, 33rd Organosilicon Symposium, Saginaw MI, April 2000, Abstract B-17.
89. Frank J. LaRonde and Michael. A. Brook, *Enantioselective Reduction Using Extracoordinate Silicon*, 33rd Organosilicon Symposium, Saginaw MI, April 2000, Abstract PB-31.
88. Mustafa Mohamed and Michael A. Brook, *Photolyses Of Tris(Trimethylsilyl)Silane And Tris(Trimethylsilyl)Silylethers: Trapping Of Silyl Radicals And Silylenes*, 33rd Organosilicon Symposium, Saginaw MI, April 2000, Abstract PB-34.
87. Mustafa Mohamed and Michael A. Brook, *Synthesis Of Allylsilane-Containing Amino Acids Via The Claisen Rearrangement*, 33rd Organosilicon Symposium, Saginaw MI, April 2000, Abstract PB-33.
86. Amro M. Ragheb, Michael A. Brook, *Squalene-Polysiloxane Cross Linked Polymer*, 33rd Organosilicon Symposium, Saginaw MI, April 2000, Abstract PB-35.
85. Ahmed H. Alzamly and Michael. A. Brook, *Thermoplastic Silicone Elastomers*, 33rd Organosilicon Symposium, Saginaw MI, April 2000, Abstract PB-36.
84. Paul Zelisko and Michael. A. Brook, *Enhanced Stability Of Alpha-Chymotrypsin And Alkaline Phosphatase Entrapped In Water-In-Silicone Oil Emulsions*, 33rd Organosilicon Symposium, Saginaw MI, April 2000, Abstract PB-32.
83. V. Bartzoka, M. A. Brook, *Protein-Silicone Synergies at Liquid-Liquid Interfaces*, Gordon Research Conference on Polymer Colloids, Tilton NH, July 1999, Abstract 42.
82. Sonya Balduzzi and M. A. Brook, Stereoselective carbon-carbon bond formation via cobalt-complexed alkynes, 82nd Canadian Society for Chemistry Conference, Toronto, June 1999, Abstract 666.
81. Frank J. LaRonde; Michael A. Brook, *Stereoselective Reduction of Ketones by Histidine: Alkoxysilane Complexes*, 82nd Canadian Society for Chemistry Conference, Toronto, June 1999, Abstract 684.
80. M. Mustafa and Michael A. Brook, *Application of the Claisen Rearrangement to the Synthesis of Amino Acid-Modified Allylsilanes*, 82nd Canadian Society for Chemistry Conference, Toronto, June 1999. Abstract 923.
79. D. Alberico, M. A. Brook, *Thermally Reversible Siloxane Elastomer*, 82nd Canadian Society for Chemistry Conference, Toronto, June 1999, Abstract Number: 18 (undergrad).
78. M. Mustafa and Michael A. Brook, *Synthesis of Allylsilanes via Ester Enolate Claisen Rearrangement of Vinylsilane-Modified Amino Acids,* Quebec and Ontario Minisymposium on Biological and Organic Chemistry, Brock University, Oct. 1998, Abstract 58.

77. F. J. Laronde and Michael A. Brook, *Reduction of Ketones with Hypervalent Trialkoxysilanes: Imidazole-Mediated Reduction of Carbonyl Compounds,* Quebec and Ontario Minisymposium on Biological and Organic Chemistry, Brock University, Oct. 1998, Abstract 57.
76. S. Balduzzi and Michael A. Brook, *Stereoselective Intramolecular Allyl Transfer,* Quebec and Ontario Minisymposium on Biological and Organic Chemistry, Brock University, Oct. 1998, Abstract 59.
75. Wayne W. Y. Lau, Brendan Hyland, James M. Dickson and Michael A. Brook, *Removal of Trace Organics from Water by Pervaporation using a composite hollow fiber Membrane with a Novel Silicone coating*, 4th National symposium on Progress in Materials Research, National University of Singapore, Mar., 1998, Proceedings 546-549.
74. F. Laronde and Michael A. Brook, *Reduction of Ketones With Hypervalent Trialkoxysilanes: Imidazole Mediated Reduction Of Carbonyl Compounds,* Fifth International Conference on Heteroatom Chemistry, London Ont., July 1998, Abstract.
73. M. Mustafa and Michael A. Brook, *Application Of The Claisen Rearrangement To The Synthesis Of Allylsilane-Modified Amino Acids*, Fifth International Conference on Heteroatom Chemistry, London Ont., July 1998
72. V. Bartzoka and Michael A. Brook, *Protein-Silicone Interactions at Liquid/Liquid Interfaces*, 72nd ACS Colloid and Surface Science Symposium, Penn. State, Pennsylvania, June 1998, Abstract 59.
71. F. Laronde and Michael A. Brook, *Diels-Alder Coupling Agents:Reversible Modification of Silica Surfaces,* 31st Organosilicon Symposium, New Orleans, May 1998, Abstract.
70. R. Stan and Michael A. Brook, *Polysiloxane Polymers Containing Nitrilotriacetic Acid Chelating Groups*, 31st Organosilicon Symposium, New Orleans, May 1998, Abstract.
69. J. Jiang, V. Bartzoka, D. Valentini and Michael A. Brook, *Surface Hydrophobization of Hydrophilic Biopolymers Using Silanes and Silicones*, Polymer Colloids Gordon Conference, Tilton, NH, July 1997.
68. Ruffolo, R., Stradiotto, M., Kuhnen, T., McGlinchey, M. J., Brook, M. A., *Molecular Lego: Building Blocks For Inorganometallic Polymers*, 80th Canadian Society for Chemistry Conference, Windsor, June 1997, Abstract.
67. Stradiotto, M., Rigby, S., Brook, M. A., McGlinchey, M. J., *Stereochemically Non-Rigid Poly(indenyl)silanes: A Synthetic, Multidimensional NMR and X-ray Crystallographic Study*, 80th Canadian Society for Chemistry Conference, Windsor, June 1997, Abstract.
66. Ralph Ruffolo, *Allylsilanes as Possible Precursors to Metal-Stabilised Silicon Cations*, 30th Organosilicon Symposium, London, Ont., May 1997, Abstract.
65. Gilles Sèbe, *Hydrophobisation of Pine Wood Surfaces by Grafting Polysiloxanes*, 30th Organosilicon Symposium, London, Ont., May 1997, Abstract.
64. Gang Hu, *Novel Polysiloxane Polymers Modified with Amino Acids*, 30th Organosilicon Symposium, London, Ont., May 1997, Abstract.

63. Mustafa Mohamed, *Photochemistry of Tris(trimethylsilyl)silane*, 30th Organosilicon Symposium, London, Ont., May 1997, Abstract.
62. Urquhart S.G., Hitchcock A.P., Brook M.A., Turci C.C., Denk M., *π-Delocalization in Organosilanes: A Core Excitation Spectroscopy Investigation*, 80th Canadian Society for Chemistry Conference, Windsor, June 1997, Abstract.
61. Michael A. Brook, S. Balduzzi, V. Bartzoka, G. Hu, F. LaRonde, G. Sèbe and R. Stan, *Modifying Biopolymers with Silanes and Silicones*, 4th International Conference on Woodfiber-Plastic Composites, Madison, WI, May 1997, Abstract.
60. Gilles Sèbe and Michael A. Brook, *Hydrophobisation of Pine Wood Surfaces by Grafting Polysiloxanes*, 4th International Conference on Woodfiber-Plastic Composites, Madison, WI, May 1997, Abstract.
59. H. A. Ketelson, Y. M. Heng, M. A. Brook and R. Pelton, *Application of Microscopy Imaging and Analysis in the Characterizataion of a Model Colloidal Silica System*, 1996 Microscopy and Microanalysis Conference, Minneapolis, Minn., Aug., 1996.
58. R. Ruffolo, M. A. Brook and M. J. McGlinchey, *Towards the Stabilization of Silicon Cations*, 9th International Organosilicon Conference, Montpellier, France, Sept. 1996, Abstract OB21.
57. T. Kuhnen, R. Ruffolo, M. Stradiotto, M. A. Brook and M. J. McGlinchey, *Molecular Lego: Building Blocks for Inorganometallic Polymers*, 9th International Organosilicon Conference, Montpellier, France, Sept. 1996, Abstract PB24.
56. V. Bartzoka, M. A. Brook M. R. McDermott, *Silicone-Protein Absorption*, 9th International Organosilicon Conference, Montpellier, France, Sept. 1996, Abstract PB23.
55. V. Bartzoka, M. A. Brook, M. R. McDermott, *Protein-Silicone Interactions at a Solid-Liquid Interface*, 212th ACS Meeting, Orlando, Florida, Aug. 1996, Abstract COLL-39.
54. H. A. M. Ketelson, R.H. Pelton and M.A. Brook, *Surface Properties of Hydrosilane-Modified Silica Colloids*, 212th ACS Meeting, Orlando, Florida, Aug. 1996, Abstract COLL-202.
53. H. A. M. Ketelson, M.A. Brook and R.H. Pelton, *Preparation of Organo-Platinum nanoparticles Supported on Silica Spheres*, 70th ACS Colloid and Surface Symposium, Clarkson University, Potsdam, NY, June 1996, Abstract 43.
52. V. Bartzoka, M. A. Brook, D. Valentini and M. R. McDermott, *Surface Interactions between Proteins and Silicon Polymers: Physical and Covalent Adhesion*, 70th ACS Colloid and Surface Symposium, Potsdam NY, June 1996, Abstract 147.
51 Robert Pelton, Huining Xiao, Michael A. Brook and Archie Hamielec, "The flocculation of polystyrene latex with mixtures of poly(p-vinyl phenol) and poly(ethylene oxide)", Paper Chemistry and Coating, Ottawa, June (1996).
50. Rodica Stan and Michael A. Brook, *Wood-Polyethylene Composite Materials*, 3rd International Conference on Woodfiber-Plastic Composites, Toronto, May 1996, Abstract.

49. Thomas Kuhnen, R. Ruffolo, M. Stradiotto, Michael A. Brook and Michael A. McGlinchey, *Molecular Lego: Builiding Blocks for Inorganometallic Polymers*, 29th Organosilicon Symposium, Evanston, Ill., Apr. 1996, Abstract P-5.
48. Vasiliki Bartzoka, Michael A. Brook and David Valentini, *Silicon-based Coupling Agents for the Compatibilization of Hydrophobic and Hydrophilic Polymers*, 29th Organosilicon Symposium, Evanston, Ill., Apr. 1996, Abstract P-23.
47. Michael A. Brook, Rodica S. Stan and David Valentini, *Silicone-Protein-Starch Adsorption*, 29th Organosilicon Symposium, Evanston, Ill., Apr. 1996, Abstract P-23.
46. Mark Stradiotto, Suzie Rigby, Don Hughes, Alex Bain, Michael A. Brook and Michael A. McGlinchey, *A Multi-Dimensional NMR Study on the Fluxional Behavour of Tris(indenyl)methylsilane: Molecular Dynamics Mapped Onto A "Hypercube"*, 29th Organosilicon Symposium, Evanston, Ill., Apr. 1996, Abstract P-5.
45. F. David Bayles and Michael A. Brook, *Understanding the α- and β-Silyl Cation Effect*, 29th Organosilicon Symposium, Evanston, Ill., Apr. 1996, Abstract P-7.
44. H. A. M. Ketelson, M.A. Brook and R.H. Pelton, *Colloidal Stability of Functionalized Silica Colloids in Polar Organic Media*, Gordon Research Conference on Polymer Colloids, Tilton, NH, 1995, Abstract P-45.
43. Michael A. Brook, H. A. M. Ketelson and R.H. Pelton, *Silicones on the Surface: Synthetic Approaches to Model Sterically Stabilized Colloidal Systems*, Gordon Research Conference on Polymer Colloids, 1995, Abstract P-46.
42. Michael A. Brook, Vasilliki Bartzoka, Jason R. Bernais and David A. Valentini, *Silicone-Biopolymer Interactions: Physical versus Covalent Adhesion*, Associating Polymers Conference, Loen, Norway, June 1995, Abstract P-7.
41. F. David Bayles and Michael A. Brook, *α and β-Silyl Carbenium Ions*, 78th Canadian Society for Chemistry Conference, Guelph, 1995, Abstract 286.
40. David A. Valentini, Michael A. Brook, Vassiliki Bartzoka and Mark R. McDermott, *Approaches to Grafting Silicones to Cellulose and Starch*, 78th Canadian Society for Chemistry Conference, Guelph, 1995, Abstract 686.
39. Vassiliki Bartzoka, Michael A. Brook, David A. Valentini and Mark R. McDermott, *Surface Interactions Between Proteins and Silicone Polymers: Physical and Covalent Adhesion*, 78th Canadian Society for Chemistry Conference, Guelph, 1995, Abstract 687.
38. Jianxiong Jiang, Michael A. Brook and Mark R. McDermott, *Silicone Grafted Starch Microspheres: Approaches to the Delivery of Bioactive Polymers*, 78th Canadian Society for Chemistry Conference, Guelph, 1995, Abstract 688.
37. H. A. M. Ketelson, M.A. Brook and R.H. Pelton, *Colloidal Stability of Functionalized Silica Colloids in Polar Organic Media*, 78th Canadian Society for Chemistry Conference, Guelph, 1995, Abstract 254.
36. Ralph Ruffolo, Michael A. Brook and Michael J. McGlinchey, *Towards the Stabilization of Silenes on Bimetallic Clusters,* 78th Canadian Society for Chemistry Conference, Guelph, 1995, Abstract 853.

35. F. D. Bayles and M. A. Brook, *α and β-Silyl Carbenium Ions*, 28th Organosilicon Symposium, Gainsville, Florida, April 1995, Abstract P-7.
34. R. Ruffolo, M. A. Brook and M. J. McGlinchey, *Towards the stabilization of silenes on bimetallic clusters*, 28th Organosilicon Symposium, Gainsville, Florida, April 1995, Abstract P-9.
33. D. A. Valentini, M. A. Brook, V. Bartzoka and Mark R. McDermott, *Approaches to Grafting Silicones to Cellulose and Starch, 28th Organosilicon Symposium*, Gainsville, Florida, April 1995, Abstract P-10.
32. C. Le Roux, H. Yang, S. Wenzel and M. A. Brook, *Using "Anhydrous" Hydrolysis to Favor Formation of Hexamethylcyclotrisiloxane from Dimethyldichlorosilane*, 28th Organosilicon Symposium, Gainsville, Florida, April 1995, Abstract B-18.
31. V. Bartzoka, M. A. Brook, D. Valentini* and Mark R. McDermott^{Y} *Surface Interactions Between Proteins and Silicon Polymers: Physical and Covalent Adhesion*, 28th Organosilicon Symposium, Gainsville, Florida, April 1995, Abstract P-6.
30. M.A. Brook and T. Stefanac, *Silane Radical Polymerization Initiators; Functionalized Homopolymers and Block Copolymers*, IIIrd International Symposium on Radical Copolymers, Lyon, France, April 1994, Abstract P-52.
29. H. Ketelson, R.H. Pelton and M.A. Brook, *Polyolefin and Silicone Sterically Stabilized Colloids*, IIIrd International Symposium on Radical Copolymers, Lyon, France, April 1994, Abstract, Abstract 148.
28. M.A. Brook and T. Stefanac, *Silane Radical Polymerization Initiators; Functionalized Homopolymers and Block Copolymers*, XXVII Organosilicon Symposium, Troy, New York, March 1994, Abstract B-29.
27. M.A. Brook, G. McGibbon and C. Roos, *Towards Silanones, XXVII Organosilicon Symposium*, Troy, New York, March 1994, Abstract P-54.
26. R. Ruffolo, L. Girard, H. Gupta, A. Decken, M.A. Brook and M.J. McGlinchey, *Towards Metal Stabilized Silicon Cations*, XXVII Organosilicon Symposium, Troy, New York, March 1994, Abstract P-57.
25. M.A. Brook and M. Roth, *The substitution of Electrophiles in Polymeric Systems: Surprisingly Unreactive Vinylsilanes*, XXVII Organosilicon Symposium, Troy, New York, March 1994, Abstract P-55.
24. H. Ketelson, M.A. Brook and R.H. Pelton, *Post-Grafting Silicone Polymers to Vinyl Modified Colloidal Silica Spheres: Switching from an Electrostatically Stabilized Dispersion to a Sterically Stabilized Dispersion*, XXVII Organosilicon Symposium, Troy, New York, March 1994, Abstract P-30.
23. J.M. Dickson, M.A. Brook, C.K. Yeom, J. Jiang, H.K. Gupta, K. Rilling and B.J. Trushinski, *Development of crosslinked oligosilystyrene pervaporation membranes for the removal of chlorohydrocarbons from water*, International Congress on Membranes and Membrane Processes, (ICOM-93), Heidelberg, Germany, Sept. 1993, Abstract 5.11.
22. Jianxiong Jiang and Michael A. Brook, *The Redistribution Reactions Between Cyclic Silicones and Trichlorosilanes*, Canadian Society for Chemistry Conference, Sherbrooke, June 1993, Abstract 540 IN E3.

21. Courtney Henry and Michael A. Brook, *Electrophilic Addition Reactions Involving Organosilane π-Nucleophiles,* Canadian Society for Chemistry Conference, Sherbrooke, June 1993, Abstract 139 IN BSP.
20. M. A. Brook, *The β-effect: Modifying the Ligands on Silicon for Synthetic Control*, OMCOS 6, Utrecht, The Netherlands, August 1991, Abstract A-70.
19. G. A. McGibbbon, M. A. Brook and J. K. Terlouw, *Investigation of β-Silicon Vinyl Carbenium Ions in the Gas Phase*, Canadian Chemical Conference, Hamilton, June 1991, Abstract 857P.
18. C. Dallaire and M. A. Brook, *The Relative Magnitude of the β-effect of Silyl, Germyl and Stannyl Groups in the Stabilization of Vinyl Cations*, Canadian Chemical Conference, Hamilton, June 1991, Abstract 702P.
17. C. Henry, R. Jueschke and M. A. Brook, *Stereocontrolled Addition Reactions fo Carbon Electrophiles to Styrylsilanes*, Canadian Chemical Conference, Hamilton, June 1991, Abstract 700P.
16. P. Modi, M. A. Brook and J.D. Dickson, *Silicon Functionalized Styrene Polymers: Cationic Control with the β-effect*, Canadian Chemical Conference, Hamilton, June 1991, Abstract 461P.
15. M. A. Brook, D.K. Chau and W. Yu, *Electrophilic Cleavage Reactions of Alkoxyhydrosilanes: The Special Case of Tartaric Acid*, XXIV Organosilicon Symposium, El Paso, April 1991, Abstract 99.
14. R. H. Pelton, A. Osterroth and M. A. Brook, *Steric Stabilization of Colloidal Particles*, 73rd Canadian Chemical Conference, Halifax, July 1990, Abstract 741.
13. C. Dallaire and M. A. Brook, *Study of the Stabilization of Vinyl Cations (β-effect) by Group 14 Metals*, IX International Symposium on Organosilicon Chemistry, Edinburgh, Scotland, July 1990, Abstract 4.8.
12. M. A. Brook, R. Jueschke, W. Yu and A. Neuy, *Electrophilic Addition Reactions of β-Silylstyrenes: The Pursuit of a Stable β-Silyl Carbocation*, IX International Symposium on Organosilicon Chemistry, Edinburgh, Scotland, July 1990, Abstract 4.7.
11. Michael A. Brook and S. Müller, *The β-effect in Silyl Enol Ether Reactions: Trapping the Intermediate Siloxy Carbonium Ion*, XXIII Organosilicon Symposium, Midland, Michigan, April 1990, Abstract B4.
10. Michael A. Brook, *The β-effect: Changing the Ligands on Silicon*, 17th Annual Ontario-Quebec Physical Organic Minisymposium, Quebec, Nov. 1989.
9. Michael A. Brook, Peter Hülser and Thomas Sebastian, *Oligotrichlorosilylstyrenes: Highly Functionalized Silicone Precursors*, 25th Canadian High Polymer Symposium, Mississauga, Canada, Aug. 23-25, 1989.
8. Michael A. Brook, Mahmud A. Hadi and Axel Neuy, *An Examination of the β-Effect in an Addition Reaction with Different Ligands on Silicon*, XXII Organosilicon Symposium, Philidelphia, USA, April 1989, Abstract P-15.
7. Michael A. Brook, Elizabeth Jefferson and Thomas Sebastian, *Polytrihalosilylstyrenes: Exploiting the β-Effect for Polymer Synthesis*, 3rd North American Chemical Congress, June 1988, Toronto, Canada, Abstract ORGN-50.

6. Michael A. Brook and Christina H. Kremers, *Glycol-Silicones: Polymeric Organic Reagents?*, XXI Organosilicon Symposium, June 1988, Montreal, Canada, Abstract P-20.
5. Michael A. Brook, *Trihalosilylstyrenes: What happened to the α- and β-Effects*, 15th Annual Physical-Organic Minisymposium, Nov. 1987, Mississauga, Canada.
4. Michael A. Brook and Peter Hülser, *Silyl Triflates: Activators for Carbon-Carbon Bond Formation*, Chemical Institute of Canada Conference, Quebec, June 1987, Abstract ORG-42-D2.
3. Nick Henry Werstiuk, Michael A. Brook and Peter Hülser, *Thermolysis of Silyl Esters: An Ultraviolet Photoelectron Study*, 14th Annual Ontario-Quebec Physical Organic Minisymposium, Nov. 1986, Toronto.
2. Michael A. Brook and Dieter Seebach, *Stabilized Cyclic Nitronates: Intermediates for More Complex Heterocycles*, 10th International Congress of Heterocyclic Chemistry, August 1985, Waterloo, Canada, Abstract G-5-54.
1. T.H. Chan and Michael A. Brook, *Some Uses of Trimethylchlorosilane in Organic Synthesis, Chemical Institute of Canada Conference*, July 1982, Toronto, Abstract OR-18-7.

Invited Lectures: at Companies

39 Wacker Chemie, Burghausen Germany — Jan. 2006
Using Synthesis to Structure Interfaces: Making Silica and Silicones Biocompatible

38 Xerox (XRCC) — Feb. 2005
Learning from Nature: Morphological Control of Silica under Mild Conditions

37 Vistikon, Jacksonville Florida — Dec. 2004
Controlling biology at silicone interfaces: an integrated approach to ocular materials

36 AMO, Newport Beach, CA — March 2004
Controlling biology at silicone interfaces: an integrated approach to ocular materials

35 Specialty Minerals, Allentown, PA — March 2004
Protein-doped, controlled morphology silica monoliths and chelating silicones: Learning from nature

34 Air Products, Allentown, PA — March 2004
Protein-doped, controlled morphology silica monoliths: Learning from nature

33 QLT, Vancouver — March 2004
An Integrated Approach to New Ocular Materials

32 Novartis Cibavision, Atlanta Georgia — June 2003
Stabilizing Proteins in Silica and Silicones

31 Alcon, Fort Worth — June 2003
Stabilizing Proteins in Silica and Silicones

30 Dow Corning, Midland Michigan — Apr. 2002
Controlling Enzyme Stability in Water-in-Silicone Oil Emulsions

29 Genencor, Palo Alto — Aug. 2001
Silicone/protein interactions: Modifying hydrophobic/hydrophilic interactions to control both protein and interfacial stability

28 Sasol, Austin Texas — Aug. 2001

An Introduction to Silanes and Silicones

27 General Electric Corporate Research and Development, Waterford NY May 2001
Silicones at Biopolymers Interfaces: A Look at Beneficial and Not-So-Beneficial Fouling

26 NPS Pharmaceuticals Mar. 2001
Silicone:Protein Conjugates: Emulsions that Stabilize Proteins Against Denaturation

25 Alcon, Fort Worth, Texas Feb. 2001
Protein-Silicone Mixtures for Biological Cleaning Applications

24 Glaxo Canada Feb. 2001
Silicone:protein conjugates: emulsions that stabilize proteins against denaturation.

23 GE-Bayer, Leverkusen June 2000
Silicon at the Interface: New Surface Active Silanes and Silicones

22 Goldschmidt, Essen June 2000
Silicon at the Interface: New Surface Active Silanes and Silicones

21 Specialty Minerals, Allentown PA April 2000
Chelating Silicones

20 CK Witco Corp. (Sistersville WV) Dec. 1999
Looking for New Hydrophilic Substrates to Bind to Silicones

19 Michigan Molecular Institute, Midland MI Oct. 1999
Silicones at the Interface: What Do Biopolymers Offer

18 General Electric, Waterford Oct. 1999
Silicones at the Interface: The Benefits of Combining Silicones with Biopolymers

17 Unilever, Port Sunlight, UK Sept. 1998
Working with Silicones

16 National Starch, New Jersey June 1998
Confusing Nature: A Look at the Hydrophobization of Biopolymers Using Silanes and Silicones

15 Brantford Chemical Inc. Dec. 1997
Using Silicon Chemistry in Drug Delivery: Prodrugs Based on Modified Silica and Oral Protein Delivery Using Silicones

14 Unilever, UK, Dec. 1997
Surface Active Materials Based on Silanes, Silicones and Natural Polymers.

13 Dow Corning Corp. Sept. 1997
Silicone-Organic Copolymers the Natural Way: An Exploration of Silicone- and Silane-Modified Biopolymers

12 MacMillan Bloedel, Vancouver BC Sept. 1997
(Reversible) Modification of Biopolymers Using Silane, Silicone and Organic Coupling Agents.

11 Eastman Chemical, Kingsport, Tennessee Aug. 1997
Wood-Plastic Composites: A Role for Organosilane and Silicone Chemistry

10 Rhône Poulenc, Lyon, France Feb. 1997
Two Very Different Areas of Silicone Chemistry: Hydrosilsesquioxane-platinum catalysts and Silicone-biopolymer copolymers

9 General Electric, Schenectedy, NY Dec. 1996

Hard and soft siloxanes: hydrosilsequioxane: platinum catalysts and silicone: protein copolymers

8 3M London, Ontario Sept. 1996
Sticking to Biopolymers: Using the Concept of Functional Group Protection in Polymer Adhesion

Rhône Poulenc, Paris, France (2 lectures) May 1996
7 *Sterically Stabilized Silica Colloids*
6 *Silicone-Protein Copolymers*

5 Organon, Akzo, Oss, The Netherlands April 1993
Silicon as Mediator: Making the Drugs and Delivering Them to the Patient

4 Shell Research Amsterdam (KSLA) July 1990
3 Dow Corning Corporation (Midland, USA) April 1990
2 University of Toronto April 1988
1 Xerox Research Centre of Canada Sept. 1988

Invited Lectures: at Universities

81 Michael A. Brook, McMaster University Undergraduate Chemistry Society March 2006.
Fighting the Imposter Syndrome as a Chemist,

80 Universite de Montpellier, II, France Jan. 2006
La silicone et la silice dans une monde biologique: le contrôle de l'interface

79 Brock University, Chemistry Department Oct. 2004
Controlling protein stability in silicones and silica: Synthesis of new biomaterials

78 University of Waterloo, Chemistry Department Oct. 2004
Controlling protein stability in silicones and silica: Synthesis of new biomaterials

77 McMaster University, BIMR Summer Research Program Weekly Seminar Series, June 2004
Compatibilizing proteins with silica and silicones (what do graduate students actually do?)

76 Institute of Chemistry, Chinese Academy of Sciences, Beijing Nov. 2003
Using Silicone:Protein Interactions to Stabilize Water/Oil Interfaces and Protein Structure

75 Qingdao University of Technology Nov. 2003
Stereocontrol Using Silyl Groups: Enantioselective Reductions and Claisen Rearrangements

74 Huazhong University of Science and Technology Nov. 2003
Using Silicone:Protein Interactions to Stabilize Water/Oil Interfaces and Protein Structure

73 Wuhan University of Technology Nov. 2003
Protein-Doped Mesoporous Silica for Drug Screening Applications

72 Nanjing University Nov. 2003
Using Silicone:Protein Interactions to Stabilize Water/Oil Interfaces and Protein Structure

71 UWEB (University of Washington Engineered Biomaterials), Seattle, May 2003
Stabilizing Proteins in Silica and Silicones

70 Ian Wark Research Institute, University of South Australia, Adelaide, South Australia

Michael A. Brook, Frank LaRonde, Mustafa Mohamed and Forrest Li March 2003
Stereocontrol Using Silyl Groups: Enantioselective Reductions and Claisen Rearrangements

69 Ian Wark Research Institute, University of South Australia, Adelaide, South Australia
M. A. Brook, Dan Chen, Kui Guo, Zhang Zheng, John Brennan, and Paul Zelisko March 2003
Formation of Protein-Containing Controlled Pore Silica for Drug Discovery

68 Perspectives on Silicon (6 hours lectures during a 30 hour short course), Ian Wark Research Institute, University of South Australia, Adelaide, South Australia July 2002

67 Queensland University of Technology, Brisbane, Australia June 2002
Bringing Organic Chemistry to Silicon-based Interfaces

66 University of Sydney, Australia June 2002
The Passivation of Silica and Protein/Water Interfaces Using Silane Coupling Agents and Functional Silicones.

65 Flinders University, Adelaide, Australia June 2002
Stabilization of Water-in-Silicone Oil Emulsions: Surfactants Formed by the Interaction of Proteins/enzymes and Functionalized Silicones
Preparing and Passivating Silica: Matching Surface Chemistry to Application

64 University of South Australia, Adelaide, Australia June 2002
The Passivation of Silica and Protein/Water Interfaces Using Silane Coupling Agents and Functional Silicones.

63 McMaster University: Undergraduate Chemistry Series March 2002
From Oral Vaccines to Breast Implants: What Happens When Proteins Meet Silicones?

62 Ecole Nationale Supérieure, Lyon, France Feb. 2002
Protéines chez soi: Dans les silicones et dans la silice (New homes for proteins in silicones and silica)

61 University of Dresden, Germany, Institute of Polymer Research Feb. 2002
The passivation of silica and silicone surfaces using silane coupling agents and proteins.

60 University of Toronto Feb. 2001
Silicone/protein interactions: Modifying hydrophobic/hydrophilic interactions to control both protein and interfacial stability

59 University of Windsor Sept. 2000
Exploiting Extracoordinate Silicon: Enantioselective Reductions and Aldol Reactions Catalyzed by Chiral Amines (and some Silicone-Protein Stuff)

58 Institut National des Sciences Appliquées de Lyon July 2000
Silicium à l'Interface: Silanes et Silicones Fonctionnalisés

57 Institut Charles Sadron, Université Louis Pasteur June 2000
Silicium à l'Interface: Silanes et Silicones Fonctionnalisés

56 Universite de Bordeaux I May 2000
Combining Silicones and Biopolymers: Controlling the Interface (en français)

55 Ecole Normale Supérieure de Lyon May 2000
Silicium à l'Interface: Silanes et Silicones Fonctionnalisés

54 University of Twente May 2000

Silicon at the Interface: New Surface Active Silanes and Silicones
53 University of Amsterdam May 2000
Exploiting Extracoordinate Silicone: Enantioselective Reductions and Aldol Reactions Catalyzed by Chiral Amines
52 Kyoto University June 1999
Chiral Extracoordinate Hydrosilanes Derived from Bidentate Ligands: Enantioselective Reduction of Ketones
51 Kyoto Institute of Chemistry June 1999
Gifts From Nature: New Materials From Silicones and Biopolymers
50 Chinese University of Hong Kong May 1999
Gifts From Nature: New Materials From Silicones and Biopolymers
49 University of Hong Kong May 1999
Chiral Extracoordinate Silanes: Catalytic and Enantioselective Reduction
48 Hong Kong University of Science and Technology May 1999
Chiral Extracoordinate Silanes Derived From Histidine: Catalytic and Enantioselective Reduction
47 McMaster University President's Stewardship "Over the Ivy Wall" March 1999
Confusing Nature: What does Lemon Pledge have to do with Oral Vaccines?
46 Chemical Engineering, McMaster University Feb. 1999
Confusing Nature: A Look at the Hydrophobization of Biopolymers Using Silanes and Silicones
45 Brock University Feb. 1999
Stereoselective Reduction of Ketones by Histidine: Alkoxysilane Complexes
44 Mount Allison University Nov. 1998
Confusing Nature: A Look at the Hydrophobization of Biopolymers Using Silanes and Silicones
43 University of New Brunswick Nov. 1998
Confusing Nature: A Look at the Hydrophobization of Biopolymers Using Silanes and Silicones
42 Acadia University Nov. 1998
Confusing Nature: A Look at the Hydrophobization of Biopolymers Using Silanes and Silicones
41 Dalhousie University Nov. 1998
Confusing Nature: A Look at the Hydrophobization of Biopolymers Using Silanes and Silicones
40 McMaster University Board of Governers Oct. 1998
Combining Silicones and Biopolymers: New Materials
39 Telemark University, Porsgrunn, Norway Feb. 1998
Silicone Degradation Mechanisms
38 Swedish Institute for Pulp and Paper, Stockholm and
Swedish Institute For Surface Science, Stockholm Dec. 1997
Silane and Silicone Coupling Agent Chemistry: Are Biopolymer Surfaces Like Siliceous Surfaces?
37 University of Toronto, Faculty of Pharmacy, Oct. 1997

Using Silicon Chemistry in Drug Delivery: Prodrugs Based on Modified Silica and Oral Protein Delivery Using Silicones

36 University of British Columbia Sept. 1997

Modifying Biopolymers with Silanes and Silicones

35 Brockhouse Institute for Materials Science, McMaster University Jan. 1997

Hard and soft siloxanes: hydrosilsequioxane: platinum catalysts and silicone: protein copolymers

34 McMaster Undergraduate Chemistry Club

Silicon in Biology Nov. 1996

Organosilanes as Protecting Groups: Different Approaches to the Stabilization of Small Molecules, Polymers, Transition Metals and Surfaces

Université Paul Sabatier, Toulouse, France (3 lectures) June 1996

33 *Organosilanes in an Inorganic World and Inorganic Silicon in an Organic World*

32 *What Happens When Silicon Meets Biology*

31 *Stabilized Group 14 Cations*

Université de Bordeaux I, France, (3 lectures) May 1996

30 Universidad del Pais Vasco, San Sebastian, Spain June 1996

29 *Organosilanes in an Inorganic World and Inorganic Silicon in an Organic World*

28 *What Happens When Silicon Meets Biology*

27 *Stabilized Group 14 Cations*

26 Landbouw Universiteit Wageningen, Wageningen, Netherlands May 1996

Silicones at the Interface: Starch/Protein/Silicone Microparticles as Oral Vaccines

25 Université de Namur, Belgium May 1996

Stabilizing β-Cations and Protecting Transition Metals with Silicon

24 Rijks Universiteit Utrecht June 1995

Controlled Modification of Silica Surfaces: Polyolefin and Silicone Sterically Stabilized Silica Colloids

23 Queen's University Sept. 1994

Silicone at the Interface: What happens when it's found in unusual places

22 McMaster University Oct. 1993

Silicon Mediated Cope-type Cyclizations OR After one year in the Netherlands, what does Fokkje (fok-ya) really mean?

21 University of Western Ontario Sept. 1993

Silicon Mediated Cope-type Cyclizations

20 University of Montpellier May 1993

Silicon Bearing Electron Withdrawing Groups: Exploiting the Differences

19 University of Toulouse May 1993

Silicon Bearing Electron Withdrawing Groups: Exploiting the Differences

18 University of Bordeaux May 1993

Silicon as Mediator: Making the Drugs and Delivering Them to the Patient

17 Free University of Amsterdam March 1993

Silicon Bearing Electron Withdrawing Groups: Exploiting the Differences

16 Open University, Milton Keynes, England March 1993

A Silicon Transplant: From the β-effect to Polymers (focus on silicon extracoordination)

15 University of Sussex March 1993
A Silicon Transplant: From the β-effect to Polymers (focus on silicon hyperconjugation)
14 University of Utrecht: Feb. 1993
Silicon Bearing Electron Withdrawing Groups: Exploiting the Differences
13 University of Groningen Feb. 1993
Silicon Bearing Electron Withdrawing Groups: Exploiting the Differences
12 University of Amsterdam Jan. 1993
A Silicon Transplant: From the β-effect to Polymers (focus on synthesis)
11 Technische Hochschule Darmstadt Jan. 1993
A Silicon Transplant: From the β-effect to Polymers (focus on β-effect)
10 Universität Kaiserslautern Jan. 1993
A Silicon Transplant: From the β-effect to Polymers (focus on silicon hyperconjugation)
9 ETH-Zürich (Seebach Group Meeting) Feb. 1993
A Silicon Transplant: From the β-effect to Polymers
Centre of Advanced Scientific Investigation (CINVESTAV) Mexico City, (2 lectures)March 1992
8*Polymeric Materials Derived from the β-Effect*
7*The β-effect: Modifying the Ligands on Silicon*
6 Guelph University March 1992
A Silicon Transplant: From the β-effect to Polymers
5 SUNY Binghampton (New York) March 1991
4 Universiteit van Amsterdam July 1990
3 McMaster University (Peacock Lecture Series) Oct. 1989
2 University of Western Ontario Oct. 1988
1 Université de Montréal Dec. 1988

Courses Taught

2005-06		**Approximate Enrolment**
Chem 756	Silicon Chemistry	8
Chem 2OA3	Organic Synthesis	380
Total enrolment is about 650 – 2 sections		
Chem 4PP3	Polymer Chemistry	22

2004-05		**Approximate Enrolment**
Killam Research Fellowship (until Jan. 2005)		
Chem 4G06	(Course coordinator)	15
Research supervisor		
1		
Chem 1AA3		350

2003-04		**Approximate Enrolment**

Killam Research Fellowship
Chem 4G06 (Course co-coordinator) 22
Research supervisor
2

2002-03		**Approximate**
Enrolment		
Chem 760	Organic Synthesis	8
Chem 2BA3	Organic Synthesis	42
Chem 4G06	(Course coordinator)	8
(on Killam Fellowship starting Jan. 2003)		

2001-02		**Approximate**
Enrolment		
Chem 2L03	Organic Laboratory	42
Chem 2BA3	Organic Synthesis	42
Chem 1AA3	Introductory Chemistry (3 units)	225

2000-01		**Approximate**
Enrolment		
Chem 760	Organic Synthesis	8
Chem 756	Organosilicon Chemistry	6
Chem 2L03	Organic Laboratory	18
Chem 4G6	Supervisor, Undergraduate Thesis	1
Chem 2BA3	Organic Synthesis	18
Chem 1AA3	Introductory Chemistry (3 units)	275

1999-2000	**On sabbatical**	
Chem 4G6	Supervisor, Undergraduate Thesis	2

1998-99		
Chem 760	Organic Synthesis	4
Chem 4G6	Supervisor, Undergraduate Thesis	2.5
Chem 4D3	Organic Synthesis	16
Chem 1AA3	Introductory Chemistry (3 units)	400

1997-98		
Chem 730a	Organic Synthesis	7
Chem 4G6	Supervisor, Undergraduate Thesis	2
Chem 4D3	Organic Synthesis	7
Chem 1AA3	Introductory Chemistry (3 units)	400

1996-97		
Chem 730a	Organic Synthesis	7
Chem 4G6	Supervisor, Undergraduate Thesis	2

Chem 4D3	Organic Synthesis	19
Chem 1AA3	Introductory Chemistry (3 units)	400

1995-96

Chem 731c	Organosilicon Chemistry	10
Chem 4G6	Supervisor, Undergraduate Thesis	3
Chem 4D3	Organic Synthesis	12
Chem 1AA3	Introductory Chemistry (3 units)	400
TSM 4A2	Theme School on New Materials (2 units, Overload), Seminar Course	25

1994-95

Chem 730a	Organic Synthesis	12
Chem 4G6	Supervisor, Undergraduate Thesis	2
Chem 4D3	Organic Synthesis	12
Chem 1A6	Introductory Chemistry (3 units)	400

1993-94

Chem720a, 721	Molecular Modelling -	1

a special double module offered to a Masters of Teaching student, overload (unpaid)

Chem 730a	Organic Synthesis	12
Chem 731c	Organosilicon Chemistry, Overload	10
Chem 1A6	Introductory Chemistry (3 units)	400
Chem 4G6	Supervisor, Undergraduate Thesis	3
Chem 4D3	Organic Synthesis	15

1992-93 (University of Amsterdam, sabbatical leave)

Graduate Course	Fundamentals of Organosilicon Chemistry	6

1991-92

Chem 4G6	Supervisor, Undergraduate Thesis	2
Chem 730d	Transition Metals/Organic Synthesis	8
Chem 2D3	Organic Chemistry, Overload	125
Chem 3D3	Organic Chemistry	40

1990-91

Chem 4G6	Supervisor, Undergraduate Thesis	2
Chem 730a	Organic Synthesis	12
Chem 2D3	Organic Chemistry, Overload	125
Chem 721	Organic Colloquium (Organizer)	20
Chem 3D3	Organic Chemistry	40

1989-90

Chem 4G6	Supervisor, Undergraduate Thesis	2
Chem 721	Organic Colloquium (Organizer)	20

Chem 3D3	Organic Chemistry	50
Chem 731c	Organosilicon Chemistry	40
1988-89		
Chem 4G6	Supervisor, Undergraduate Thesis	2
Chem 720b	Molecular modelling	10
Chem 3D3	Organic Chemistry	40
1987-88		
Chem 4G6	Supervisor, Undergraduate Thesis	2
Chem 720a	Computers in organic chemistry	12
Chem 730a	Synthesis	12
1986-88		
Chem 206	Polymer Section	35
1986-87		
Chem 705	Computers in organic chemistry	12
Chem 4G6	Supervisor, Undergraduate Thesis	2
1985-86		
Chem 208	Polymer Section	35
Chem 705	Synthesis, 4 lectures	20
Chem 4G6	Supervisor, Undergraduate Thesis	1

Thesis Committees

External Referee

Student	Supervisor	Institution	Degree	Year
Alexandra Bartole	Dr. I. Manners	University of Toronto	Ph.D.	2005
Jessie Zhang	Dr. R. Kluger	University of Toronto	Ph.D.	2005
Nicola Lake	Dr. J. Ralston	Ian Wark Institute, University of South Australia, Adelaide	Ph.D.	2004
Claire Minard-Basquin	Dr. C. Chaix Dr. C. Pichot	École Normale Supérieure Lyon	Ph.D.	2000
Sandjeevi-Ranganathan, S.	Dr. R. Whitney, Dr. W. Baker	Queen's University	Ph.D.	1998
Matuana-Molanda, L.	Dr. J. Balatinecz	University of Toronto	Ph.D.	1997

Vlad, F.-I. 1997	Dr. A. Rudin	University of Waterloo	Ph.D.
Jihai Ma 1996	Dr. T. Tidwell	University of Toronto	Ph.D.
Andrea Dalacu 1994	Dr. M. F. Richardson	Brock University	M.Sc.
Umesh R. Parshotam 1993	Dr. Kim Baines	University of Western Ontario	Ph.D.
Flores Rutjes 1993	Dr. Henk Hiemstra	Universiteit van Amsterdam	Ph.D.
Lucy Lolkema 1993	Prof. Nico Speckamp Dr. Henk Hiemstra	Universiteit van Amsterdam	Ph.D.
Wim Jan Koot 1993	Prof. Nico Speckamp Dr. Henk Hiemstra	Universiteit van Amsterdam	Ph.D.
Louis Plamondon 1988	Prof. Nico Speckamp Dr. J. Wuest	Université de Montréal	Ph.D.
Peter Tai Wah Cheng 1988	Dr. S. MacLean	University of Toronto	Ph.D.

McMaster

Student	Supervisor	Degree	Year
Greg Bahun	Dr. A. Adrononv	Ph.D	
Xiangchun Yin	Dr. H. Stover	Ph.D.	
Tina Guenther	Dr. J. Valliant	Ph.D.	
Adrienne Pedrich	Dr. P. Harrison	Ph.D.	
John Kaldis	Dr. M. J. McGlinchey	Ph.D.	
Ju Zhang	Dr. R. H. Pelton	Ph.D.	
Rahime Benhabbour	Dr. A. Adrononv	Ph.D	
Sreedhar Cheekoori	Dr. J. McNulty	M.Sc.	
Ken Rilling 2005	Dr. J.M. Dickson	Ph.D.	
Travis Besanger 2005	Dr. J. Brennan	Ph.D.	
Yaling Xu 2005	Dr. R. H. Pelton	Ph.D.	
Sanela Martic 2005	Dr. M. Brook	M.Sc.	

An Investigative Study Of Silicon-Based Materials as Alternative Matrices for Maldi-TOF Applications

X. Sui 2005	Dr. J. D. Brennan	M.Sc.

Bola Sogbein — Dr. John Valliant — Ph.D. 2005

Ilena Dumbrava — Dr. W. Leigh — M.Sc. 2005

Amro Ragheb — Dr. M. A. Brook — Ph.D. 2005

Controlling Protein-Silicone Interactions by the Modification of Silicone Elastomers with Poly(ethylene oxide)

Paul Zelisko — Dr. M. A. Brook — Ph.D. 2004

The interaction of proteins with functionalized silicones

Masaaki Amako — Dr. M. A. Brook — Ph.D. 2004

Synergy of Polydimethylsiloxanes and Late Transition Metal Complexes

Tom Owens — Dr. W. J. Leigh — Ph.D. 2004

Jiahong Tan — Dr. J. Brash — Ph.D. 2004

Jacques Archambeault — Dr. J. Brash — Ph.D. 2002

Maggie Wang — Dr. R. F. Childs — M.Sc. 2002

Guodong Zheng — Dr. H. D. H. Stover — Ph.D. 2002

Xioashong Lu — Dr. J. Warkentin — Ph.D. 2001

Mustafa Mohamed — Dr. M. A. Brook — Ph.D. 2001

Sonya Balduzzi — Dr. Michael Brook — Ph.D. 2001

Reactive Silyl Protecting Groups

Brandi Meeks — Dr. H. Sheardown — M.Sc. 2001

Ahmed Alzamly — Dr. M. A. Brook — Ph.D.- withdrawn

Frank J. LaRonde — Dr. M. A. Brook — Ph.D. 2000

C_2-symmetric ligands

Sudarshi Regismond — Dr. F. Winnik — Ph.D. 2000

Rodica Stan — Dr. Michael Brook — Ph.D. 1999

Synthesis of Novel Silicones and Silanes for Interface Control

Vasiliki Bartzoka — Dr. Michael Brook — Ph.D. 1999

Silicone Protein Interactions

Mark Stradiotto — Dr. Michael Brook — Ph.D. 1999

(co-supervised with with M. J. McGlinchey)

The Dynamics and Reactivity of η^1*-Indenyl Complexes*

Christine Braderic — Dr. W.J. Leigh — Ph.D. 1998

Karen Moffat — Dr. H. Stöver — Ph.D. 1998

Suzie Rigby — Dr. M. McGlinchey — Ph.D. 1997

Stephen Urquhart — Dr. A. Hitchcock — Ph.D. 1997

Paul Charpentier *Metallocene-catalyzed semi-batch and continuous polymerization of ethylene*

Dr. A. Hamielec — Ph.D. 1997

Dr. M. A. Brook

Ralph Ruffolo *Silanes and Allylsilanes as Possible Precursors for Transition Metal Metal-stabilized Silylium Ions*

Dr. M. A. Brook — Ph.D. 1997

Dr. M.J. McGlinchey

Howard Ketelson — Dr. M. A. Brook — Ph.D. 1996

Dr. R. H. Pelton

The Colloidal Stability and Surface Chemistry of Stöber Silica

David Valentini — Dr. M. A. Brook — M.Sc. 1996

Silicon-Modified Starch Composites

Courtney Henry — Dr. M. A. Brook — Ph.D. 1994

Exploring the Synthetic Utility of Vinyldichlorosilanes and Vinylarylsilanes

Graham McGibbon — Dr. J. K Terlouw — Ph.D. 1994

Tom Stefanac — Dr. M. A. Brook — M.Sc. 1994

Silane Based Radical Polymerization: Functionalized Homopolymers and Copolymers

Mike Roth — Dr. M. A. Brook — M.Sc. 1994

Controlled Formation of New Si-based Materials

Sengen Sun — Dr. P. Harrison — Ph.D. 1994

Kai Li — Dr. H. D. H. Stöver — Ph.D.
1994

Carol Dallaire — Dr. M. A. Brook — Ph.D.
1992
Study of 1-Methylated-2-trimethylsilyl Cations: An Examination of the β-Effect for Silyl,
Germyl and Stannyl Groups

Andrea Osterroth — Dr. M. A. Brook — M.Sc.
1991
Dr. R.H. Pelton
Poly(methyl methacrylate) Sterically Stabilized by Silicone

Weifeng Yu — Dr. M. A. Brook — M.Sc.
1991
The Roles of Ligands on Silicon

Thomas Sebastian — Dr. M. A. Brook — M.Sc.
1990
Trichlorosilylstyrene Oligomers

Defense Only

Ed Ng — Dr. H. Jain, Business — Ph.D.
2005

Young-Min Kim — Dr. J. MacGregor, Chem. Eng. — Ph.D.
2005

Damian Jankowicz (Chair) — Dr. S. Becker, Psychology — Ph. D.
2004

Michelle Vosburgh (Chair) — Dr. J. Weaver, History — Ph. D.
2004

Beata Gajewski (Chair) — Dr. M. Jordana, Medical Sciences — Ph.D.
2004

Tim Jacobs (Chair) — Dr. J. Ferns, English — Ph.D.
2003

Lina Liu — Dr. H. Sheardown, Chem. Eng. — M.Sc.
2003

Abhaya Kulkarni — Dr. M. Boyle — Ph.D.
2003

Millman, J. (Chair) — Dr. D. Andrews — Ph.D.
2003

Pauli Kavalakatt — Dr. H. D. H. Stöver, Chem.
M.Sc. — 2002

Youqing Shen — Dr. S. Zhu, Chem. Eng. — Ph.D.
2001

Nekmohamed Manji — Dr. C. Nahmias, Med. Phys.
Ph.D. — 2001

Linda Li — Dr. R. Pelton, Chem. Eng.
M.Sc. — 2001

Iva Matkovic 2001	Dr. K. Dunbabin, History	Ph.D.
Bruce Wilson 2001	Dr. B. Baetz, Civil Eng.	Ph.D.
Brandi Meeks 2001	Dr. H. Sheardown, Chem. Eng.	M.Sc.
Leslie Ritchie 2000	English	Ph.D.
Stevens, Ronald (Chair) 2000	Dr. Weitz, Med. Sci.	Ph.D.
Downey, Jeff 2000	Dr. H. Stöver,	Ph.D.
Martin, W. 1999	Dr. A. Hrymak	M.Sc.
MacKay, Geoff (Chair) 1999	Dr. G. Wright,	Ph.D.
Arida, F. (Chair) 1998	Dr. M. Elbastawi, Mech. Eng.	Ph.D.
Marriott, Michael (Chair) Ph.D.	Dr. B. Milliken, Psychology 1998	
Wu Chen, Iris (Chair) 1998	Dr. M. Blajchman, Medical Sciences	Ph.D.
Barker, S. 1997	Dr. G. Purdy, Mat. Sci. & Eng.	Ph.D.
Wauben, I. 1997	Dr. S. Atkinson, Nutrition	Ph.D.
Marc Webster 1996	Dr. Muller, Biology	Ph.D.
Hua Guo 1995	Dr. A. Hamielec	Ph.D.
Hui Teng Er 1995	Dr. J. Warkentin	M.Sc.
Naomi Laing Ph.D.	Dr. W. Chan, Biochemistry 1994	
Darryl Scott Pickering 1992	Dr. L. P. Niles, Neurosciences	Ph.D.
Greg Sluggett 1993	Dr. W. J. Leigh	Ph.D.
Nien Nguyen 1991	Dr. W. J. Leigh	M.Sc.
William Mills 1990	Dr. B. E. McCarry	M.Sc.
J. Paul Santerre 1990	Dr. J. Brash, Chemical Engineering	Ph.D.

Charles Younger 1990	Dr. R.A. Bell	M.Sc.
William Gunn withdrawn	Dr. N.H. Werstiuk	Ph.D.
Lynn M. Cameron 1990	Dr. D.B. MacLean	M.Sc.
Michel B.M. Mangion 1990	Dr. G.P. Johari, Materials Science	Ph.D.
Richard Perrier 1989	Dr. M. J. McGlinchey	Ph.D.
J. Douglas McCallion 1986	Dr. J. Warkentin	M.Sc.

Committee and Association Activity

McMaster Committees	**Position**	**Year**
Dean's Advisory Committee	Member	2005
Science/Engineering Promotion/Tenure Committee	Member	2005-2008
Teaching and Learning Grants Assessment Committee	Member	2005
Intellectual Property Board	Member	1998-2003
Selection Committee, Associate Dean of Science	Member	2002
Faculty of Science Undergraduate Curriculum and Calendar	Member	1998, 2000-01
Health Sciences Admissions Committee	Member	1998
McMaster Patent Board	Member	1996-98
President's Task Force on Support of Research at McMaster	Member	1996
Selection Committee, Dean of Science	Member	1995
Dean's Advisory Committee on Computing	Member	1994-96
Faculty Health Sciences Graduate Admissions/Study Committee		Member 1995-98
Graduate Curriculum and Policy Committee	Member	1994-7
Salary Anomaly Adjustment Committee Faculty of Science	Member	1991
Graduate Reviewing Committee Faculty of Science	Member	1990-92
Hiring Committee, CIS Science Coordinator	Member	1989
Ad Hoc Committee on Research and Senior Undergraduate Computing Research Needs	Member	1989
McMaster-IBM Cooperative Project	Member	1988-89

Departmental Committees

Departmental Advisory Committee	Member	2005-2006
Nanomaterials Committee (CFI)	CoChair	2005
Undergraduate Reviewing Committee	Member	2005-06
Implementation of CHEM3LI3	Member	2003

Departmental Advisory Committee	Member	2001-2002
Computing Facility Committee	Member	2001-2002
Accreditation Committee	CoChair	2001-2002
Undergraduate Curriculum and Calendar Committee	Chair	2000-02
Freshman Committee	Member	2000-01
Graduate Curriculum Committee	Member	2000-01
Undergraduate Curriculum and Calendar Committee	Chair	1998
Year One Frosh Week (gave lecture)		1998
Chemistry Computer Committee	Member	1998
Organic Comprehensives Coordinator	Chair	1996-98
Teaching Associates Coordinator	Chair	1996-97
Chemistry Chair Selection Committee	Member	1995
Departmental Advisory/P&T Committee	Member	1994-96
Departmental Seminars	Chair	1993-96
X-ray Facility Users Committee	Member	1993-94
Graduate Curriculum Committee	Member	1993-94
Comprehensive Exam Coordinator	Chair	1992
Facilities Committee	Member	1991-92
Departmental Advisory Committee	Member	1989-93
Departmental Computer Users Committee	Member	1991
X-ray Facility Users Committee	Member	1991-92
Selection of X-Ray Facility Manager	Member	1990-91
Graduate Recruiting	Chair	1987-90
Graduate Reviewing	Chair	1987-92
IBM Submission for Masters in Computer Chemistry	Member	1986-88
Graduate Curriculum	Member	1986-87
Undergraduate CIC Student Advisor	Chair	1986-88
Chemistry Club Faculty Advisor	Chair	1986-87
Safety Committee	Member	1985-86
Facilities Committee	Member	1985-87